



# Newcrest Briefing Book

August 2019

# Disclaimer

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## **Forward Looking Statements**

This presentation includes forward looking statements. Forward looking statements can generally be identified by the use of words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue”, “outlook” and “guidance”, or other similar words and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. The Company continues to distinguish between outlook and guidance. Guidance statements relate to the current financial year. Outlook statements relate to years subsequent to the current financial year. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, performance and achievements to differ materially from statements in this presentation. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company’s good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect the Company’s business and operations in the future. The Company does not give any assurance that the assumptions will prove to be correct. There may be other factors that could cause actual results or events not to be as anticipated, and many events are beyond the reasonable control of the Company. Readers are cautioned not to place undue reliance on forward looking statements. Forward looking statements in these materials speak only at the date of issue. Except as required by applicable laws or regulations, the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in assumptions on which any such statement is based.

## **Non-IFRS Financial Information**

Newcrest results are reported under International Financial Reporting Standards (IFRS) including EBIT and EBITDA. This presentation also includes non-IFRS information including Underlying profit (profit after tax before significant items attributable to owners of the parent company), All-In Sustaining Cost (determined in accordance with the updated World Gold Council Guidance Note on Non-GAAP Metrics which was released in November 2018 and partially adopted by Newcrest (due to the inability to adopt the leasing changes until after 30 June 2019)), AISC Margin (realised gold price less AISC per ounce sold (where expressed as USD), or realised gold price less AISC per ounce sold divided by realised gold price (where expressed as a %), Interest Coverage Ratio (EBITDA/Interest payable for the relevant period), Free cash flow (cash flow from operating activities less cash flow related to investing activities), EBITDA margin (EBITDA expressed as a percentage of revenue) and EBIT margin (EBIT expressed as a percentage of revenue). These measures are used internally by Management to assess the performance of the business and make decisions on the allocation of resources and are included in this presentation to provide greater understanding of the underlying performance of Newcrest’s operations. The non-IFRS information has not been subject to audit or review by Newcrest’s external auditor and should be used in addition to IFRS information.

## **Reliance on Third Party Information**

The views expressed in this presentation contain information that has been derived from sources that have not been independently verified. No representation or warranty is made as to the accuracy, completeness or reliability of the information. This presentation should not be relied upon as a recommendation or forecast by Newcrest.

# Disclaimer

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## **Competent Person's Statement**

The information in this presentation that relates to Mineral Resources or Ore Reserves (other than Red Chris and Havieron) has been extracted from the release titled "Annual Mineral Resources and Ore Reserves Statement –31 December 2018" dated 14 February 2019 (the original release). Newcrest confirms that it is not aware of any new information or data that materially affects the information included in the original release and, in the case of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original release continue to apply and have not materially changed. Newcrest confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original release.

The information in this presentation that relates to Exploration Results at Havieron has been extracted from the release titled "Quarterly Exploration Report" dated 25 July 2019 (the original Havieron release). Newcrest confirms that it is not aware of any new information or data that materially affects the information included in the original Havieron release and that all material assumptions and technical parameters underpinning the estimates in the original Havieron release continue to apply and have not materially changed. Newcrest confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original Havieron release.

## **Red Chris foreign estimates**

The estimates of Mineral Resources for the Red Chris deposit are qualifying foreign estimates under the ASX Listing Rules reported in accordance with the National Instrument 43-101 (NI 43-101) by Imperial and filed on SEDAR ([www.sedar.com](http://www.sedar.com)) on 30 September 2015. These qualifying foreign estimates were re-stated by Imperial in their July 2017 Mineral Resource and Mineral Reserve statement ([www.imperialmetal.com](http://www.imperialmetal.com)) but have not been updated since 30 September 2015, and have not been depleted for production to date.

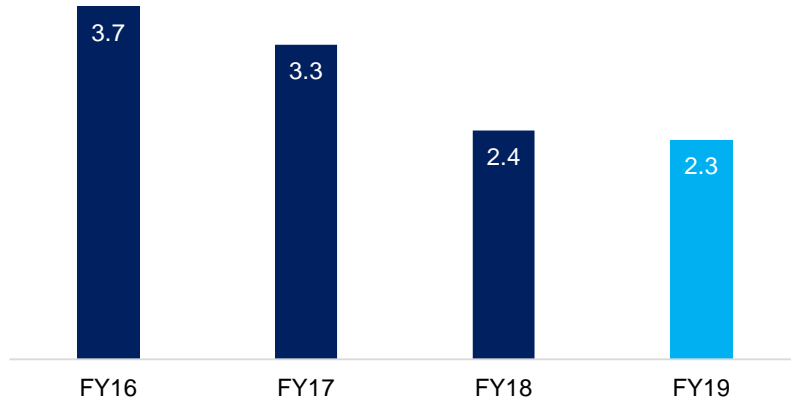
The supporting information required by ASX Listing Rule 5.12 was contained in the release titled "Presentation re Newcrest's agreement to acquire potential Tier 1 orebody in Canada" dated 11 March 2019 (original Red Chris release). Newcrest confirms that it is not aware of any new information or data relating to the Red Chris qualifying foreign estimates that materially impacts on the reliability of the estimates or Newcrest's ability to verify such foreign estimates following completion as mineral resources in accordance with Appendix 5A of the ASX Listing Rules. The supporting information provided in the original Red Chris release referred to in ASX Listing Rule 5.12 continues to apply and has not materially changed.

## **Cautionary statement**

The estimates of Mineral Resources for the Red Chris deposit are qualifying foreign estimates under the ASX Listing Rules and are not reported in accordance with the JORC Code. Competent persons have not done sufficient work to classify the qualifying foreign estimates as Mineral Resources in accordance with the JORC Code. It is uncertain, that following evaluation and further exploration, the foreign estimates will be able to be reported as Mineral Resources in accordance with the JORC code.

# Safety update

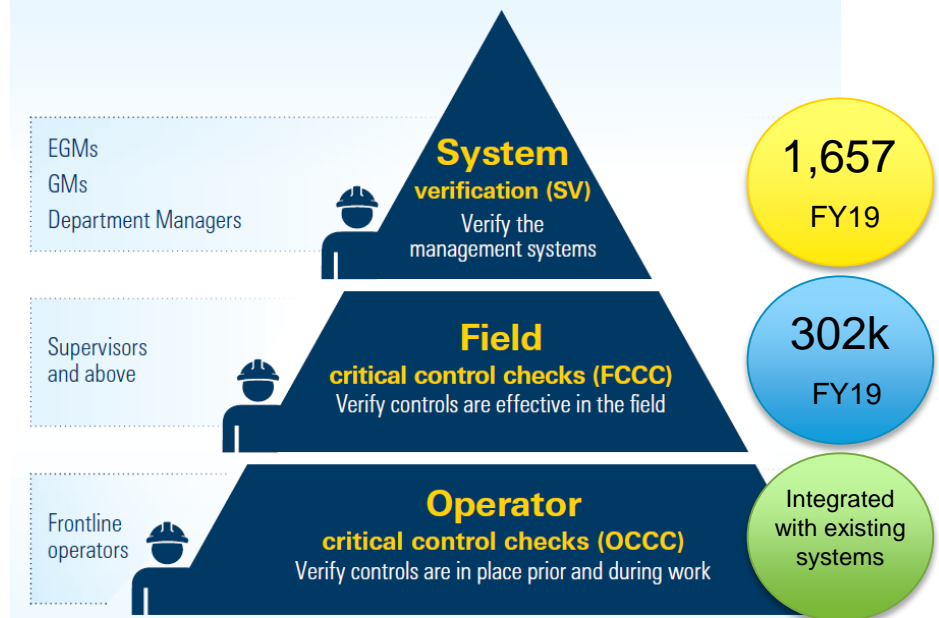
## FY16- FY19 TRIFR<sup>1</sup>



## Safety System Highlights

- Newcrest's three safety pillars continue to deliver improvement:
  - A strong safety culture
  - Critical controls for every high-risk task
  - Process safety management
- ~3.5 years fatality free, zero life changing injuries

## Critical Control Management Verifications



## Process Safety

- Site based process safety plans developed
- Improved Management of Change processes
- Improved investigation of major incidents

<sup>1</sup> TRIFR = Total Recordable Injury Frequency Rate (per million hours worked)

# Sustainability

## High international and industry performance standards



**MINING WITH PRINCIPLES**

**International Council on Mining & Metals** members – bound by the Sustainability Framework

- *Must be independently assured annually against the 10 Principles and position statements*



**Minerals Council of Australia** members – Enduring Value Framework aligned to ICMM

**World Gold Council** members – Conflict-free Gold Standard, draft Responsible Gold Principles



✓ **Extractive Industries Transparency Initiative** – participating member

✓ **UN Guiding Principles on Business and Human Rights** – aligned/committed



✓ **Voluntary Principles on Security and Human Rights** – aligned/committed

✓ **International Cyanide Management Code** – participating member

## Annual ESG assessment & ratings



FTSE4Good



# Sustainability - New policies, new targets



## Sustainability

*Aspire to be an industry leader*



## Water Stewardship

*Catchment-based assessments*

## Biodiversity

*No net loss of biodiversity values for new projects*



## Climate Change

*Applying phased approach to TCFD reporting*



## Emissions Intensity

*30% lower by 2030*



## Carbon Price

*\$25/t-\$50/t in investment decisions & planning*

# Climate Change, Shadow Carbon Price, TCFD

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## Climate Change Policy and 2030 emissions target

- Sustainability is core to our business
- A sustainable business is a successful business
- Target of 30% reduction in emissions intensity by 2030 (from 2018). Based on CO<sub>2</sub>-e per tonne of ore treated.



## Shadow carbon price in capital/investment decisions

- Sensitivity analysis for investment decision making & planning
- Apply carbon price in range \$25/t to \$50/t CO<sub>2</sub>-e
- For regions with no carbon price emissions scheme



## Task force on climate-related financial disclosures (TCFD)

- We are a supporter of TCFD
- ~800 global firms are supporters
- Newcrest to progressively report on TCFD via Sustainability Report

# Investment Proposition

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Long  
reserve life



Low cost  
production



Do what  
we say



Organic growth  
options  
*(at Cadia, Lihir, Wafi  
Golpu & Red Chris)*



Strong exploration  
& technical  
capabilities

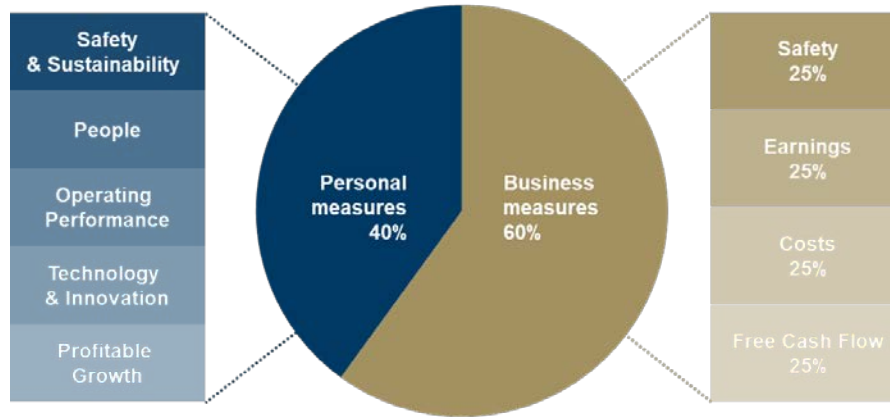


Financially robust

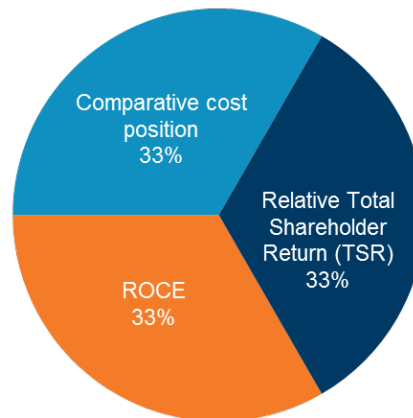


# An aligned executive remuneration structure

## Short Term Incentive Criteria<sup>1</sup>



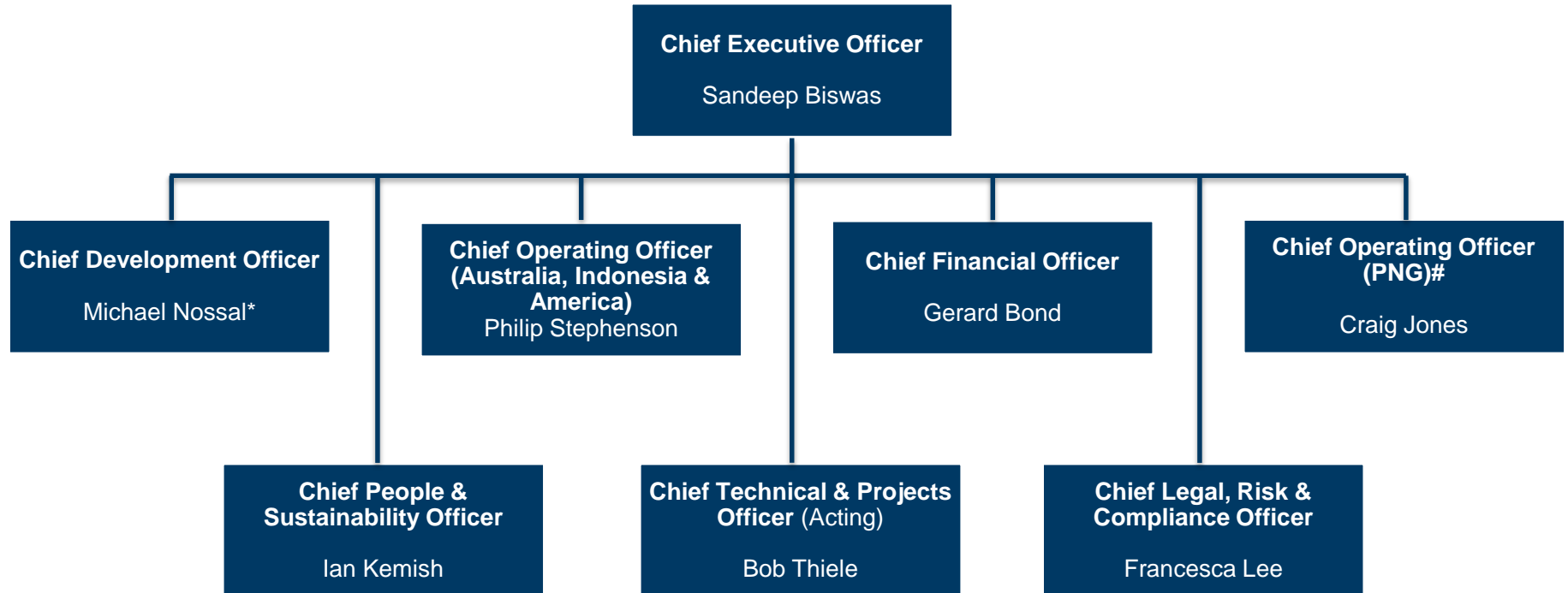
## Long Term Incentive Criteria



<sup>1</sup> Each of the CEO, CFO and other Executives have different specific personal measures under the 5 categories listed.

# Preparing for the next phase of growth

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- Balancing stability of senior leadership with renewal
- Aligning responsibilities and clarifying accountabilities

\* Departing in March 2020 Quarter  
# Craig Jetson departing end December 2019

# Our operating assets and advanced projects

## Cadia (100%)

FY19 Production: 913koz Au, 91kt Cu  
 FY19 AISC: \$132/oz  
 Ore Reserves: 22moz Au & 4.3mt Cu  
 Mineral Resources: 38moz Au & 8.3mt Cu  
 Product: Copper/gold concentrate, gold doré

## Lihir (100%)

FY19 Production: 933koz Au  
 FY19 AISC: \$887/oz  
 Ore Reserves: 24moz Au  
 Mineral Resources: 50moz Au  
 Product: Gold doré

## Telfer (100%)

FY19 Production: 452koz Au, 15kt Cu  
 FY19 AISC: \$1,253/oz  
 Ore Reserves: 2.0moz Au & 0.20mt Cu  
 Mineral Resources: 6.4moz Au & 0.59mt Cu  
 Product: Copper/gold concentrate and gold doré

## Golpu (50%)

Development project for which a Special Mining Lease application has been made

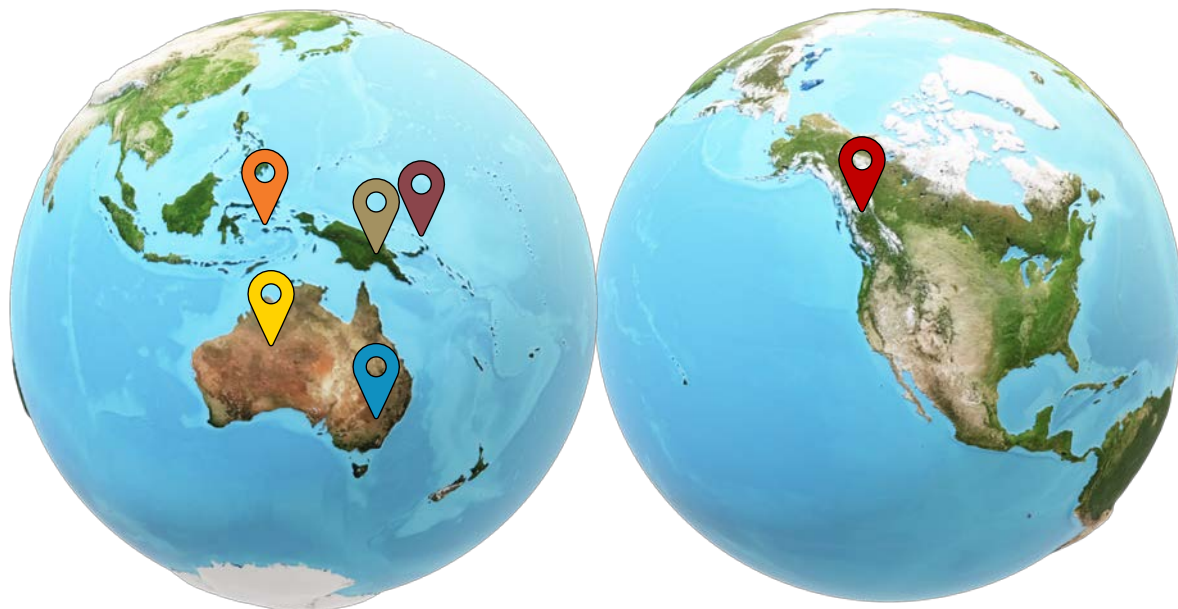
Ore Reserves: 5.5moz Au & 2.5mt Cu  
 Mineral Resources: 13moz Au & 4.4mt Cu  
 Product: Copper/gold concentrate, gold doré

## Gosowong (75%)

FY19 Production: 190koz Au  
 FY19 AISC: \$1,099/oz  
 Ore Reserves: 0.37moz Au & 0.54moz Ag  
 Mineral Resources: 1.1moz Au & 1.5moz Ag  
 Product: Gold and silver doré

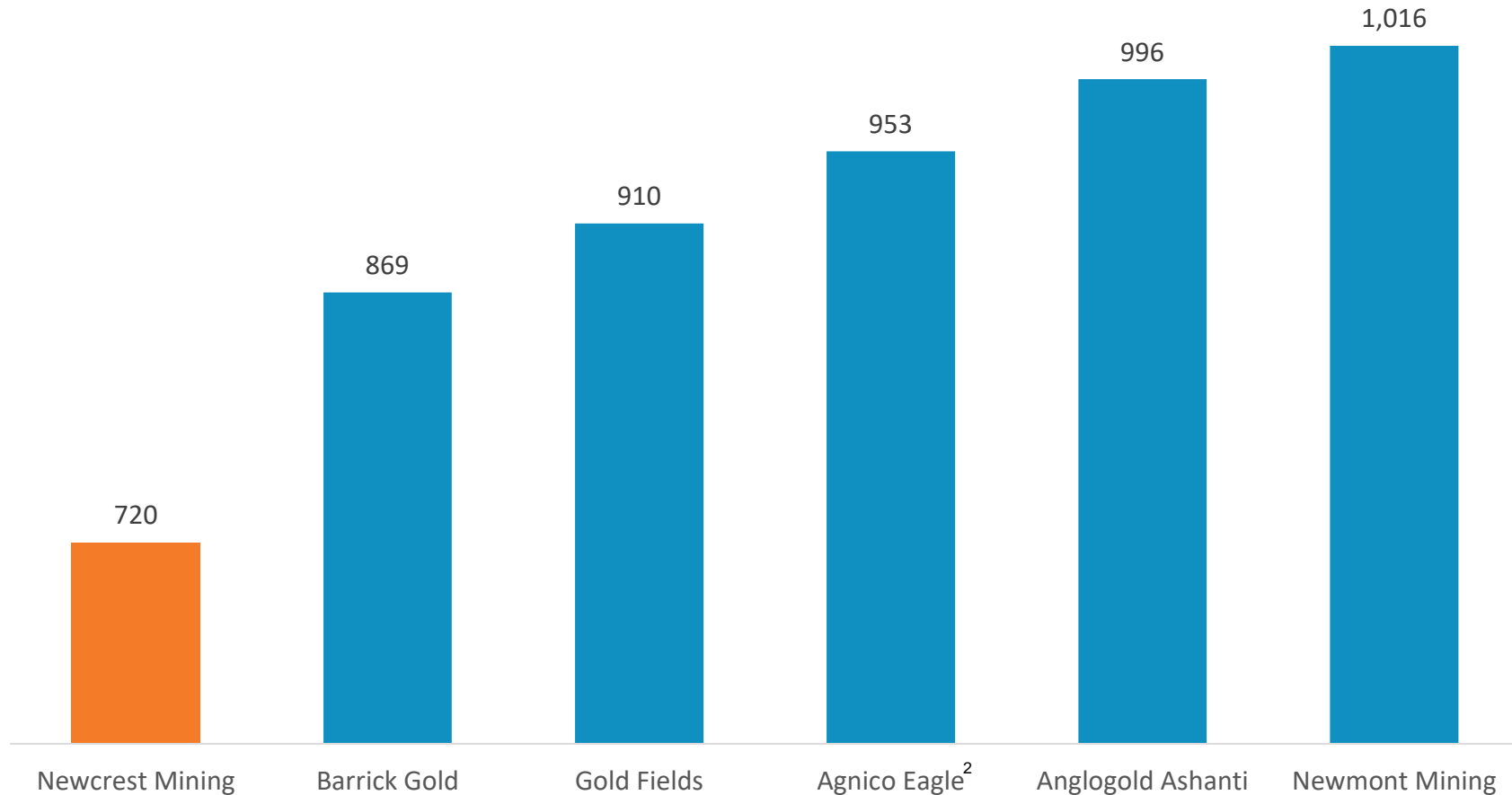
## Red Chris JV (70%)

Acquired 70% in August 2019  
 Product: Copper/gold concentrate



# Lowest cost major gold producer

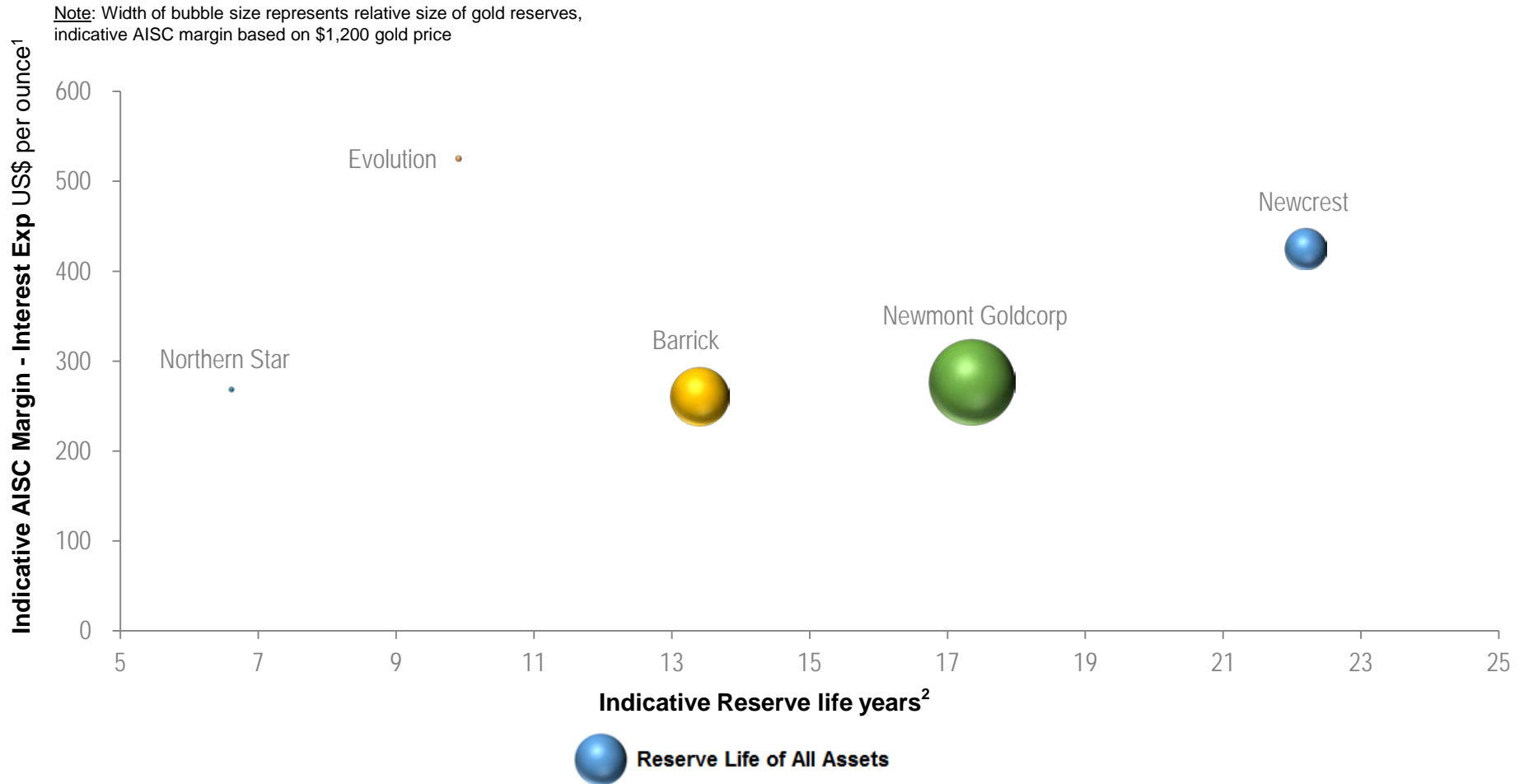
AISC/oz for the most recently reported quarter<sup>1</sup> (\$/oz)



<sup>1</sup> AISC/oz from company reports for 3 months ended 30 June 2019. Based on data available as at 5:00pm AEST, 15 August 2019. For comparative purposes, reported AISC for the 3 months ending 31 March 2019 were as follows: Newcrest \$738/oz, Barrick \$825/oz, Newmont \$907/oz, Agnico Eagle \$836/oz, AngloGold \$1,009/oz, Gold Fields \$871/oz.

<sup>2</sup> Agnico Eagle report AISC/oz produced

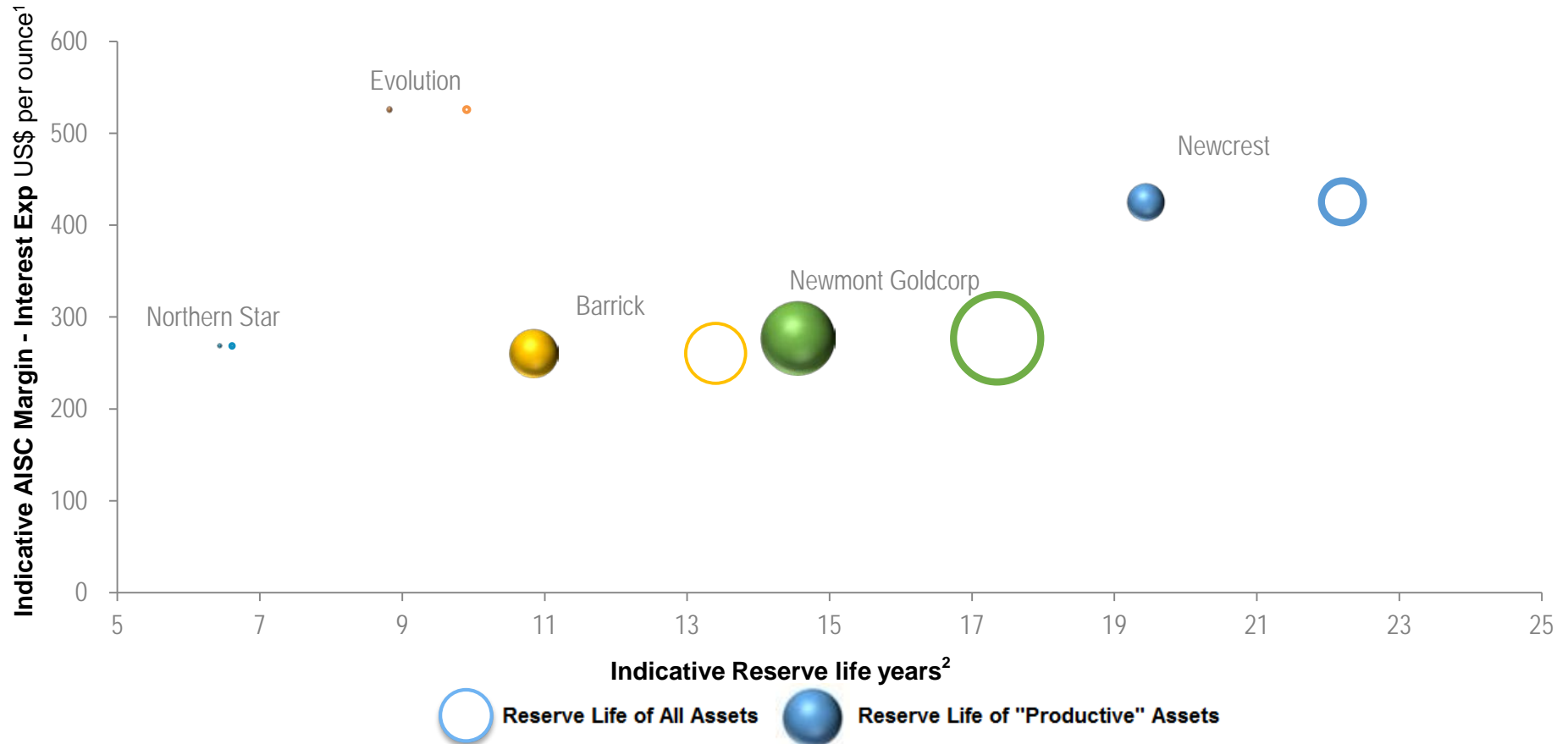
# Newcrest retains long reserve life advantage



- The data points represent each company's performance for the 12 months ended 30 June 2019. AISC data has been obtained from company statements and is calculated on a per ounce of gold sales basis. Interest expense has been obtained from company statements. Interest expense has been divided by attributable gold sales obtained from company statements (or attributable gold equivalent ounces when only that is available, where by-product reserves have been converted to gold equivalent at spot market prices)
- Reserves reflect proven and probable gold reserves (contained metal) as at 31 December 2018 (other than Goldcorp which is at 30 June 2018 and Northern Star which is at 30 June 2019) obtained from company statements. Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates. Proven and probable gold reserve numbers and relevant production numbers have been adjusted to reflect announced divestments and acquisitions (including the completion of the Newmont and Goldcorp merger and the completion of the Nevada JV by Newmont Goldcorp and Barrick).

# Newcrest retains long reserve life advantage

Note: Width of bubble size represents relative size of gold reserves, indicative AISC margin based on \$1,200 gold price



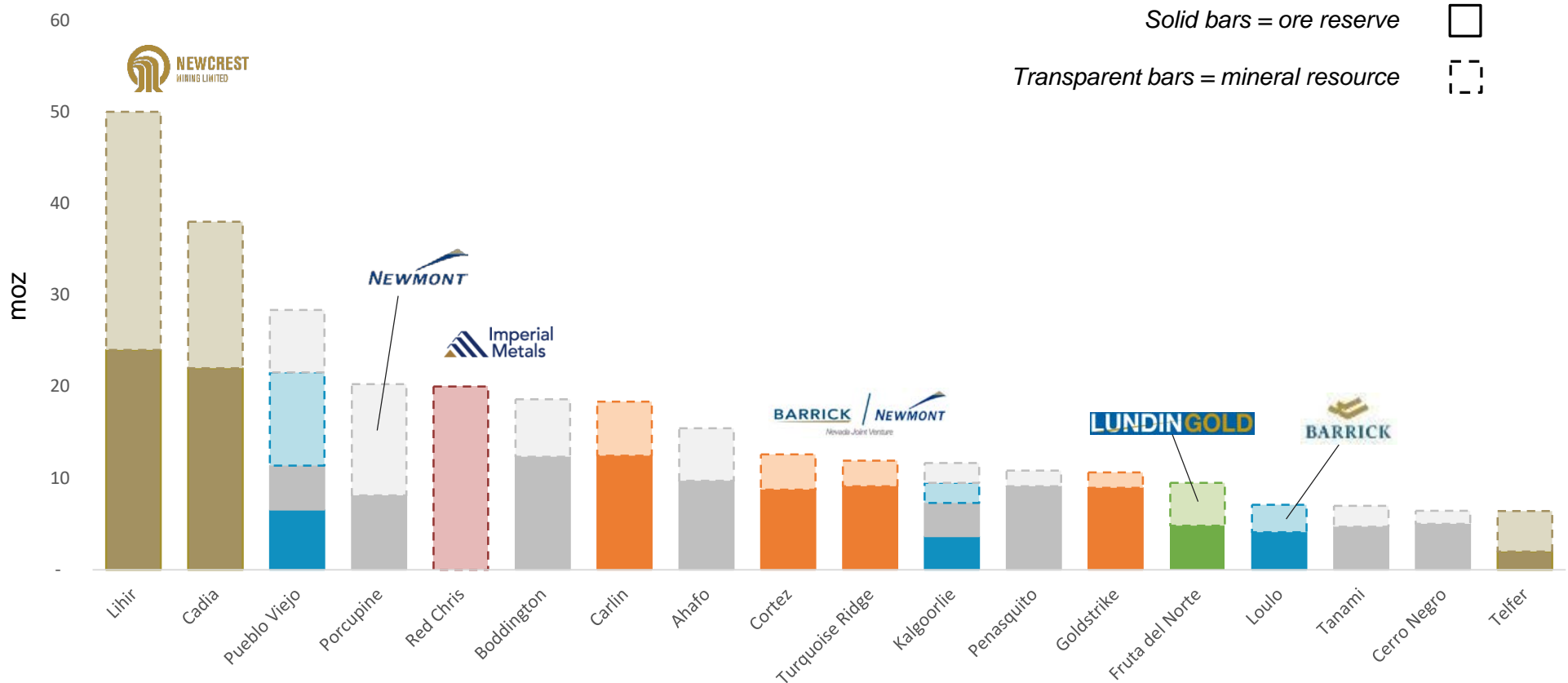
○ Reserve Life of All Assets      ● Reserve Life of "Productive" Assets

1 The data points represent each company's performance for the 12 months ended 30 June 2019. AISC data has been obtained from company statements and is calculated on a per ounce of gold sales basis. Interest expense has been obtained from company statements. Interest expense has been divided by attributable gold sales obtained from company statements (or attributable gold equivalent ounces when only that is available, where by-product reserves have been converted to gold equivalent at spot market prices)

2 Reserves reflect proven and probable gold reserves (contained metal) as at 31 December 2018 (other than Goldcorp which is at 30 June 2018 and Northern Star which is at 30 June 2019) obtained from company statements. Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates. Proven and probable gold reserve numbers and relevant production numbers have been adjusted to reflect announced divestments and acquisitions (including the completion of the Newmont and Goldcorp merger and the completion of the Nevada JV by Newmont Goldcorp and Barrick). Reserves adjusted for certain projects and assets that are not operational, dormant and/or are announced divestments. Specifically, reported reserves have been adjusted to exclude the following: Newcrest: Golpu, Fruta del Norte. Barrick: Norte Abierto (50%), Goldrush (61.5%), Massawa (83%). Newmont Goldcorp: Coffee, NuevaUnion (50%), Norte Abierto (50%), Goldrush (38.5%). Evolution: Marsden. Northern Star: Carbine, Paulsens.

# Lihir and Cadia are in a class of their own

## Resource & Reserve base of global majors' operating assets (moz)<sup>1,2</sup>



- Based on producing assets held by Barrick, Newmont and Newcrest with an attributable reserve >4moz (with Telfer, Red Chris and Fruta del Norte included for illustration). Goldcorp assets have been shown as Newmont following the merger of the two companies. Fruta del Norte is currently under construction and has been provided as a comparison shown on a 100% basis. Red Chris is shown on a 100% basis. Source: Company reports as at 13 August 2019. Reserves reflect proven and probable gold ore reserves (contained metal) and Resources represent measured, indicated and inferred gold mineral resources (contained metal) as at 31 December 2018 (other than Newmont's Goldcorp assets which is at 30 June 2018 and Lundin Gold which is at 19 September 2018).
- The information on this slide relates to the Mineral Resource estimates of Imperial and is based on the "National Instrument 43-101 Technical Report" dated 30 September 2015 and filed by Imperial on SEDAR ([www.sedar.com](http://www.sedar.com)) in accordance with National Instrument 43-101 as required by Canadian securities regulatory authorities. The estimates of the Imperial Mineral Resources contain Measured and Indicated Mineral Resources of 1.0Bt at 0.35 g/t Au and 0.35% Cu for 12Moz contained gold and 8.0Bib contained copper and Inferred Mineral Resources of 0.7Bt at 0.32 g/t Au and 0.29% Cu for 8.1Moz contained gold and 5.0Bib contained copper (Data reported to two significant figures and this may cause discrepancies in totals). See also Red Chris foreign estimates in the disclaimers of this presentation.

# Strong total shareholder returns

Total Shareholder Return – 1 July 2015 to 9 August 2019 (%)<sup>1</sup>

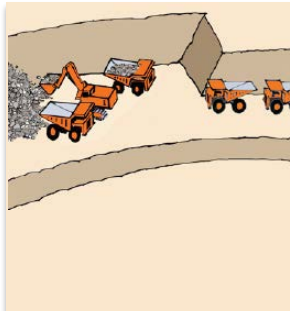


<sup>1</sup> Source: Bloomberg. Data based on close of trade on 1 July 2015 to close of trade on 9 August 2019. All figures in USD other than S&P/TSX Global Gold Index (CAD) and Newcrest AUD



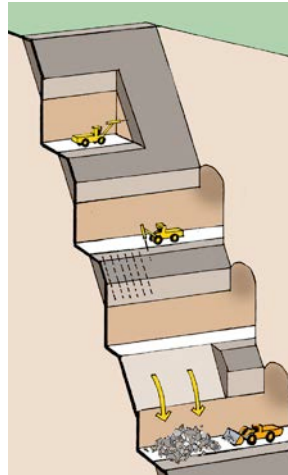
# A unique suite of technical capabilities

*Lihir, Telfer*



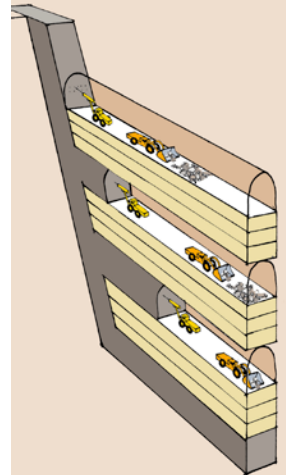
**Open pit**

*Telfer*



*Reef*

*Gosowong*



*Narrow Vein*

*Telfer*



*Sublevel Caving*

*Cadia*



*Block/Panel Caving*

**Selective Underground**

**Bulk Underground**


**Processing**






*Large scale comminution  
Copper-gold flotation*

*Pressure oxidation  
Cyanide & carbon in leach*

# Value breakthrough strategies

targeting five breakthroughs by end of calendar 2020



Breakthrough Levers	Operating	Adopting now	Evaluating	Developing future					
 <b>Next Gen Caving</b>	High draw, deep caving	Cave process control	Single pass caving	Remote production	Post caving leaching				
 <b>Next Gen HydroMet</b>	Selective oxidation	Low cost complex ores	Co-product streams	New metal chemistries	In place leaching				
 <b>Selective Processing</b>	Coarse flotation	Screening & sorting	Mass sensing & sorting	Ultra low energy grinding	In mine processing				
 <b>Robotic Mining</b>	In mine sensing	Robotic mining	Mechanical excavation	Intelligent selective mining	Real time M2M optimisation				
 <b>Sustainable Mines</b>	Energy efficiencies	Renewable energy growth	Bio-friendly chemistries	Geo-stable tails co-disposal	Mine void use				
TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs

Note: Progressive update since 2018 Investor Day

# Value breakthroughs captured

## Competitive technology advantages

**1** Draw height inventory +50%

**High draw, deep caving**

- Unique high draw capability
- Utilises intensive conditioning
- Potential extension to Red Chris and future Newcrest caves

**2** Oxygen energy constraint release +30%

**Selective oxidation**

- Selective oxidation optimises partial oxidation
- Lower energy demand
- Increases margins
- Potential to reduce cut off grades

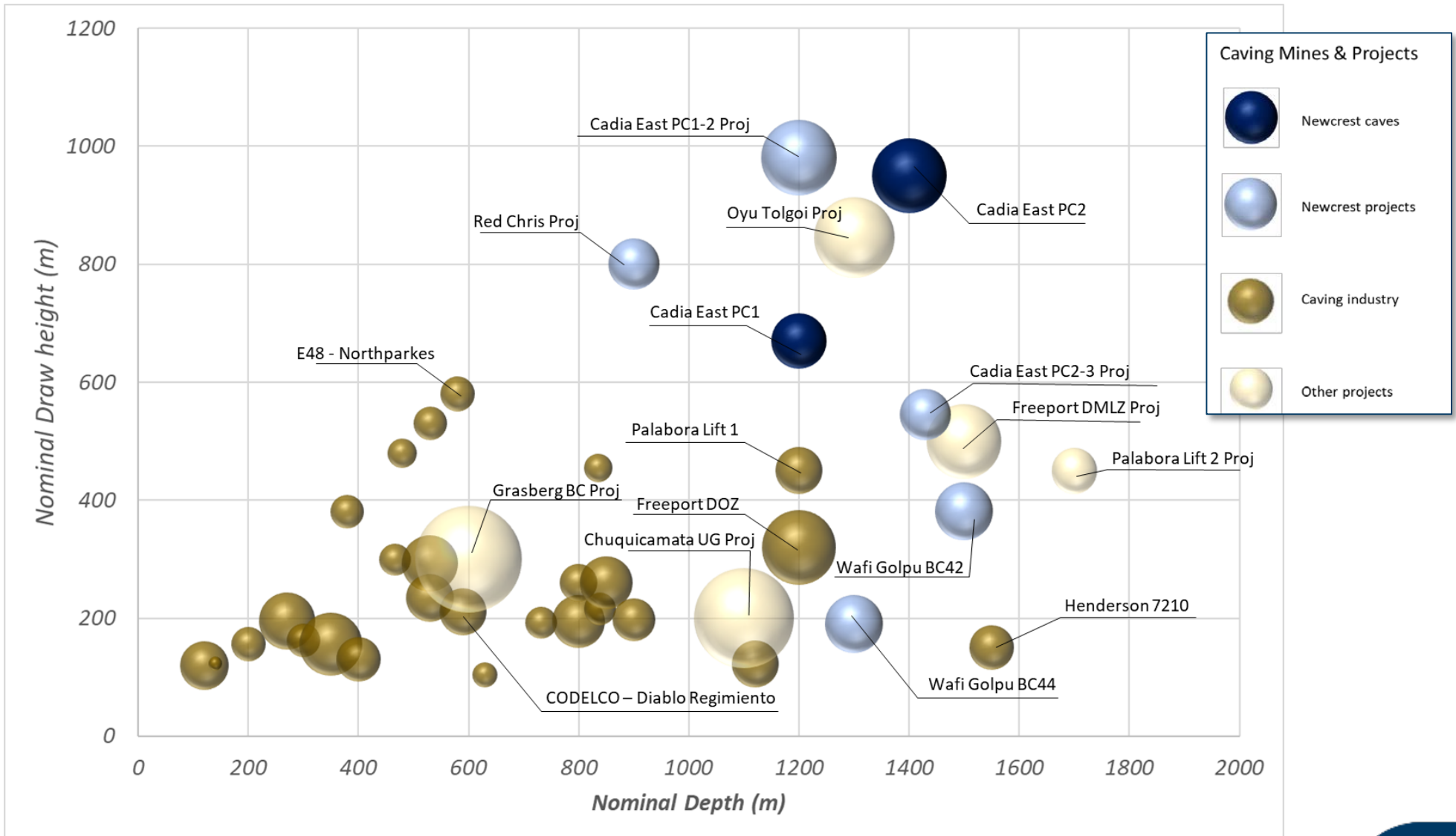
**3** Grind energy intensity saving +15%

**Coarse flotation**

- Reduces grind energy intensity
- Rate and/or recovery benefits
- Optimising on Cadia Train 3
- Looking to install elsewhere, with potential extension to many deposits

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs

# High draw, deep caving expertise



Bubble size represents production rate.  
 Data source: International caving benchmarking study stage 2, University of Queensland.



# NextGen Caving

deeper, more productive

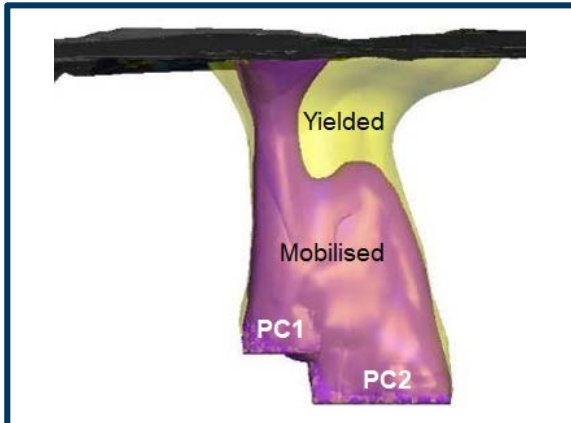
## Breakthrough challenge:

Materially reduce cave establishment costs and improve the productivity of caving as grades decline

Remove personnel from hazardous environments

## Value capture levers

- High draw, deep caving
- Caving process control
- Remote production
- Single pass caving
- Post cave leaching



### High draw, deep caving

Hydrofracturing equipment, Cadia



### Cave process control

Elexon cave monitoring beacons



### Remote production

Autonomous loader trials, Cadia



### Single pass caving

Undercut-less concept for trial

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs



# NextGen HydroMet

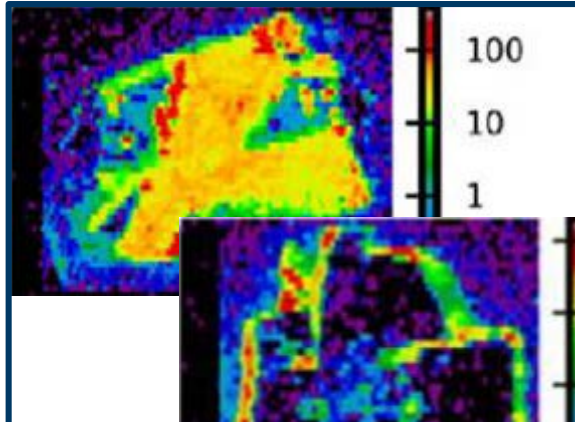
*processing at lower cost*

## Breakthrough challenge:

Selective treatment based on improved understanding of orebody mineralogy, experimentation and ore type process customisation

## Value capture levers

- Selective oxidation
- Low cost complex ores
- Co-product streams
- New metal chemistries
- In place leaching



### Selective oxidation

*Pyrite end members, Lihir*



### Low cost complex ores

*Kapit North stockpile, Lihir*



### New metal chemistries

*Telfer glycine Cu-Au leach lab testing*



### In place leaching

*Ridgeway column testing*

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs



# Selective processing

*focus on processing ore at all scales*

## Breakthrough challenge:

Rejection of unprofitable material as early as possible in the mining and refining process

Improve plant performance and mineral recoveries

## Value capture levers

- Coarse flotation
- Screening & sorting
- Mass sensing & sorting
- Ultra low energy grinding
- In mine processing



**Coarse flotation**

*Coarse ore flotation, Cadia*



**Screening & sorting**

*Screening demo, Telfer*



**Screening & sorting**

*Ore sorting demo, Telfer*



**Mass sensing & sorting**

*Mass sensor demo, Telfer*

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs



# Robotic mining

remote, safe, productive mining

## Breakthrough challenge:

Creating a long term vision of the future mine system and collaborating with developers and manufacturers to make this an operational reality

## Value capture levers

- In mine sensing
- Robotic mining
- Mechanical excavation
- Intelligent selective mining
- Real time mine-to-mill optimisation



### In mine sensing

Proximity detection system, Telfer



### Robotic mining

Remote mobile equipment operation, Lihir



### Robotic mining

Single pass bolting, Cadia



### Mechanical excavation

Komatsu Dyna Miner prototype mark II

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs





# Sustainable mines

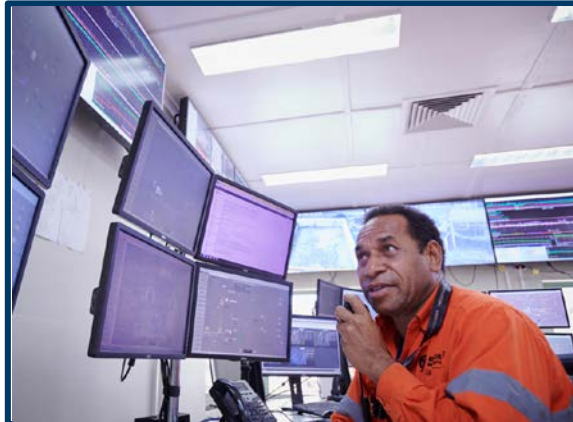
reducing footprint and costs

## Breakthrough challenge:

Improve the environmental and social impact of our operations and projects through technology and innovation

## Value capture levers

- Energy efficiencies
- Renewable energy growth
- Bio-friendly chemistries
- Geo-stable tails co-disposal
- Mine void use



### Energy efficiencies

*Selective oxidation, Lihir*



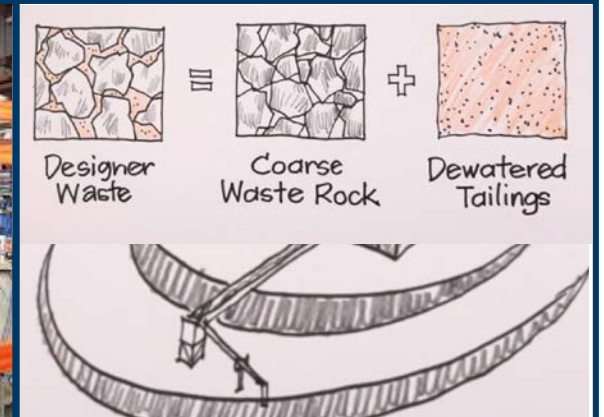
### Renewable energy growth

*Geothermal power infrastructure, Lihir*



### Bio-friendly chemistries

*Laboratory test work*



### Geo-stable tails co-disposal

*Concept development*

TRL	9	8	7	6	5	4	3	2	1
Technology Readiness Levels Ref NASA & EU	Extend	Build / Optimise	Field Demo	Scale Testing	Prototype	Component Testing	Proof of Concept	Formulate Concept	Principles / Needs

# Cadia – Reduced costs & increased cash flow



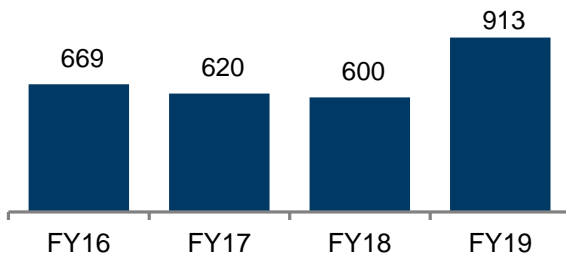
## Site Process

Element	Description
Mining	Panel Cave mining from Cadia East (Panel Cave 1 and 2), with underground crushing and conveyor to surface
Processing	High pressure grinding rolls, SAG mills, ball mills, flotation, coarse ore flotation and gravity concentration
Output	Principally copper/gold concentrate, gold doré

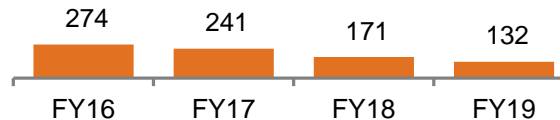
## Key Statistics

Gold Reserve Life:	~24 years <sup>1</sup>
Gold Ore Reserves:	22moz
Gold Mineral Resources:	38moz
Copper Ore Reserves:	4.3mt
Copper Mineral Resources:	8.3mt
FY20 Prod. Guidance:	760-840koz Au, ~100kt Cu <sup>2</sup>
Q4 FY19 AISC:	\$122/oz
Q4 FY19 Production:	241koz
Permitted Processing:	32mtpa
Workforce (FTE) <sup>3</sup> :	~800 employees ~690 contractors

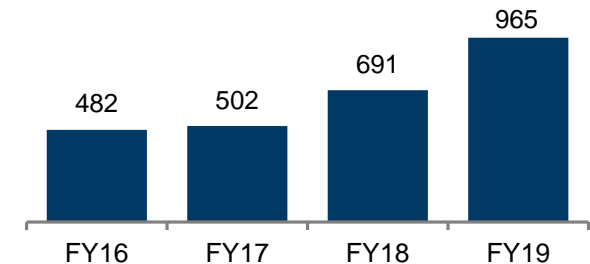
## Production (koz)



## All-In Sustaining Cost (\$/oz)



## Free Cash Flow (\$m)<sup>4</sup>



<sup>1</sup> Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) as at 31 December 2018 divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates and therefore estimate reserve life does not necessarily equate to operating mine life. For Cadia Ore Reserves and Mineral Resources refer to slides 75 to 78.

<sup>2</sup> Achievement of guidance is subject to market and operating conditions.

<sup>3</sup> At 30 June 2019. Employees are Newcrest directly employed FTEs, contractor FTEs include full time embedded contractors and project, replacement labour and other contractors

<sup>4</sup> Free cash flow is before interest and tax



# NextGen Caving

## PC2 fully fractured through to surface

- Substantially reduces the likelihood of exposure to an air gap hazard
- PC2 eastern draw is being controlled with a focus on the growth of the eastern wall and cave back
- Improving maturity of fragmentation in PC2 will allow increased efficiency

**Comminution Zone** – Rock actively flowing and breaking up

**Dilating Zone** – Rock mass broken and dilating, but not yet flowing

**Yielding Zone** – Major structures/faults moving; rock mass between not yet broken up.

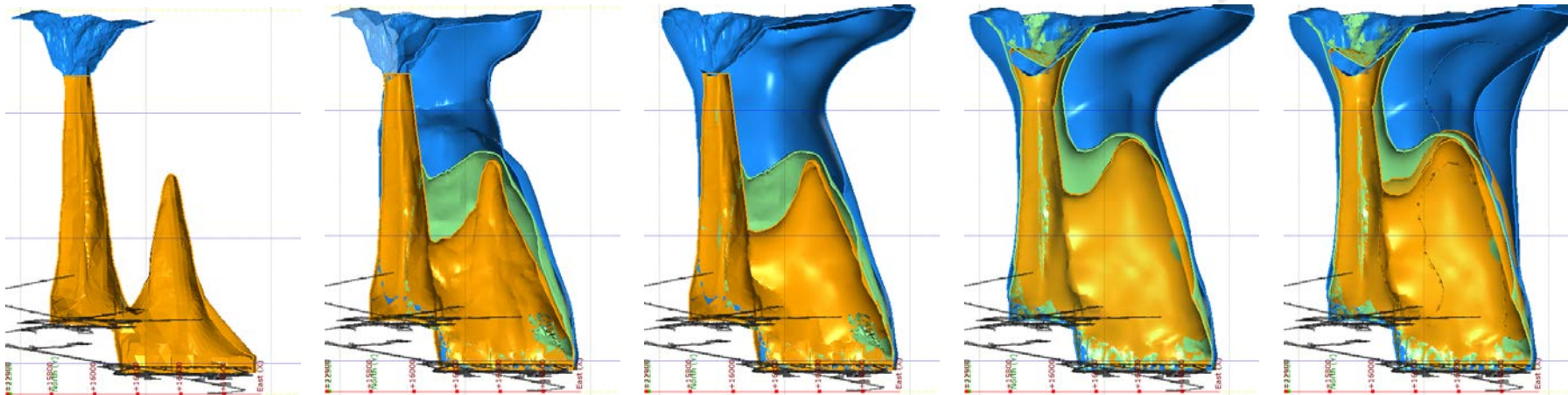
mid 2017

early 2018

mid 2018

late 2018

May, 2019





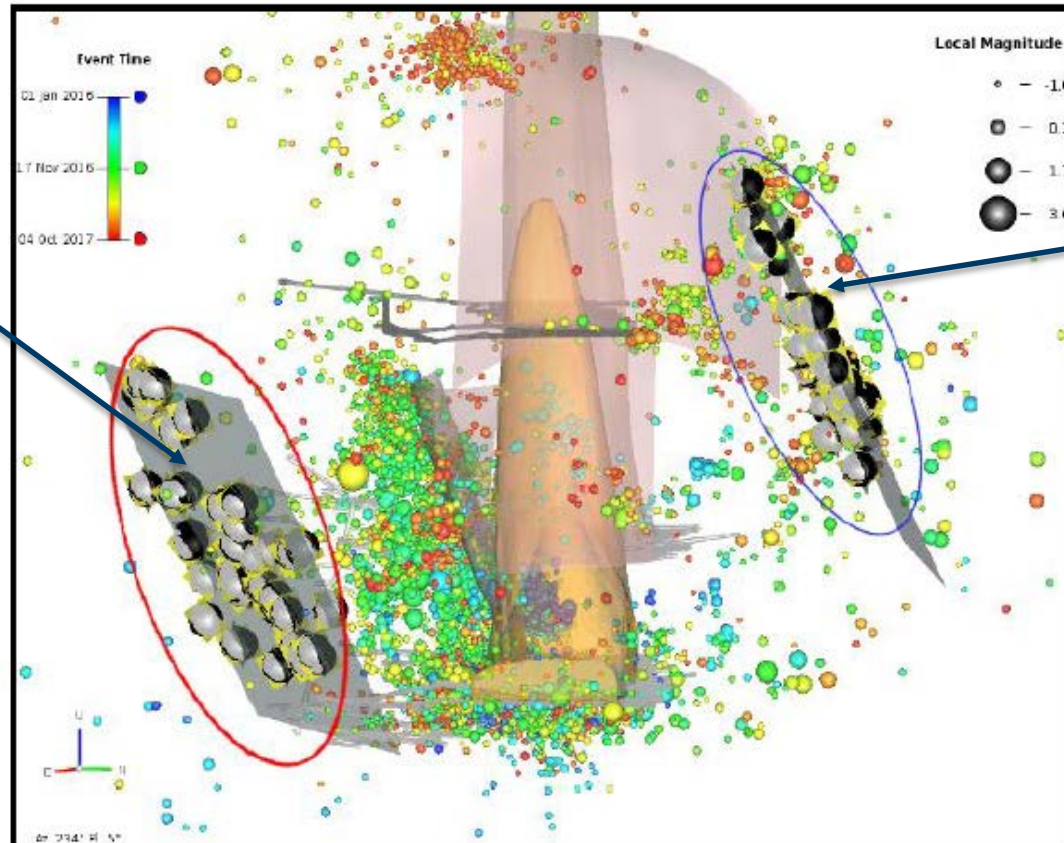
# NextGen Caving improvements

*post April 2017 seismic event*

## Boundary fault hydrofracturing for seismic release

Hydrofracturing will be completed on identified high stress faults outside of the cave zone to reduce the potential impact of future fault slips.

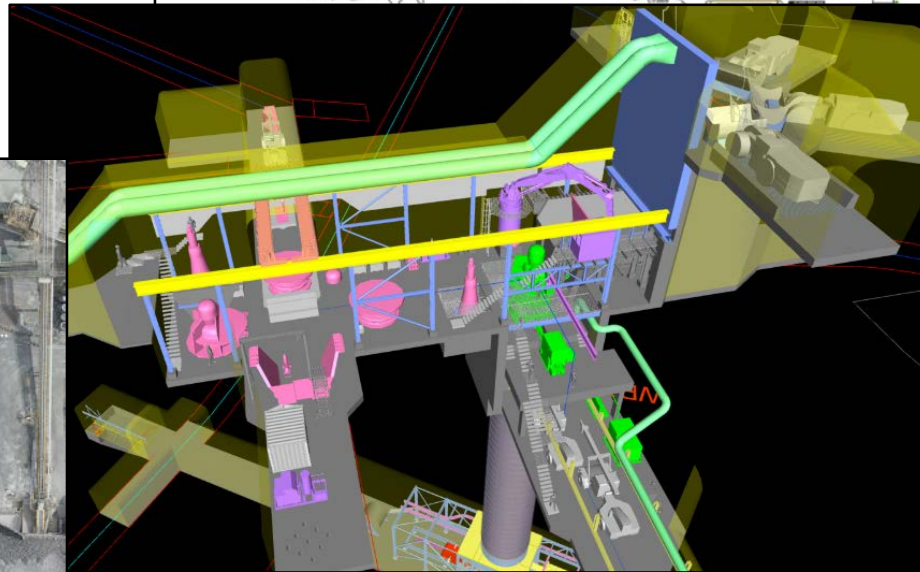
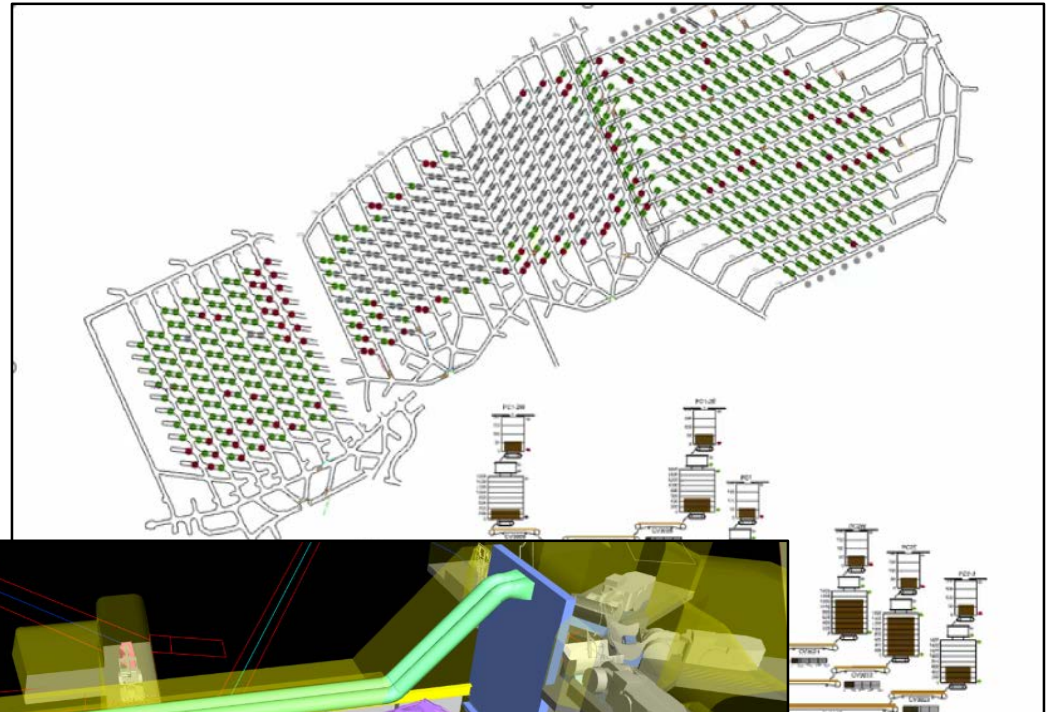
Near cave fault  
to be  
hydrofractured



Near cave fault  
to be  
hydrofractured

# Cadia Expansion Feasibility Study progressed

- Findings of the Cadia Expansion Feasibility Study expected to be released by the end of December 2019
- In conjunction with the study, Cadia commenced early works on the next block cave of Cadia East, PC2-3.



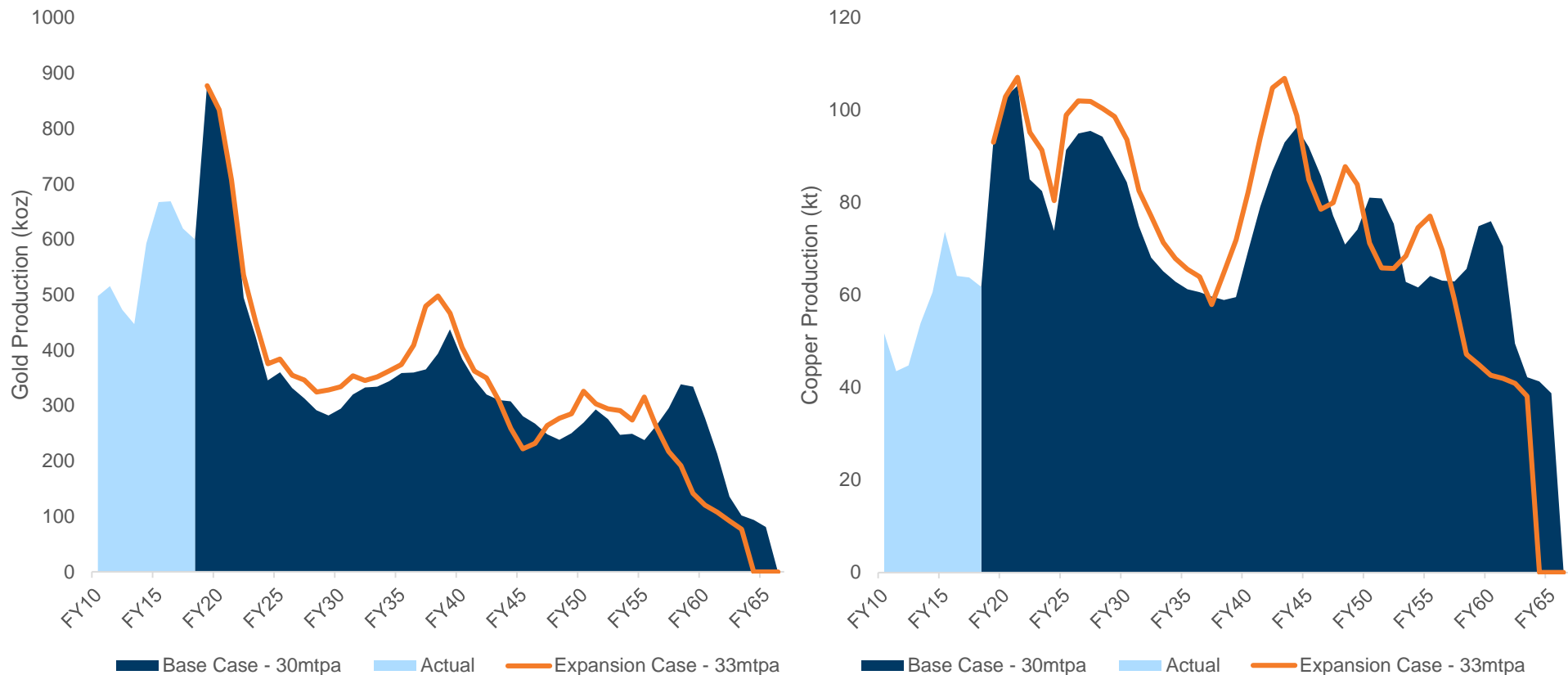
# Cadia Expansion PFS Findings<sup>1,2</sup>

## Cadia - uniquely long life

### Debottlenecking to 33mtpa with upside potential to 35mtpa

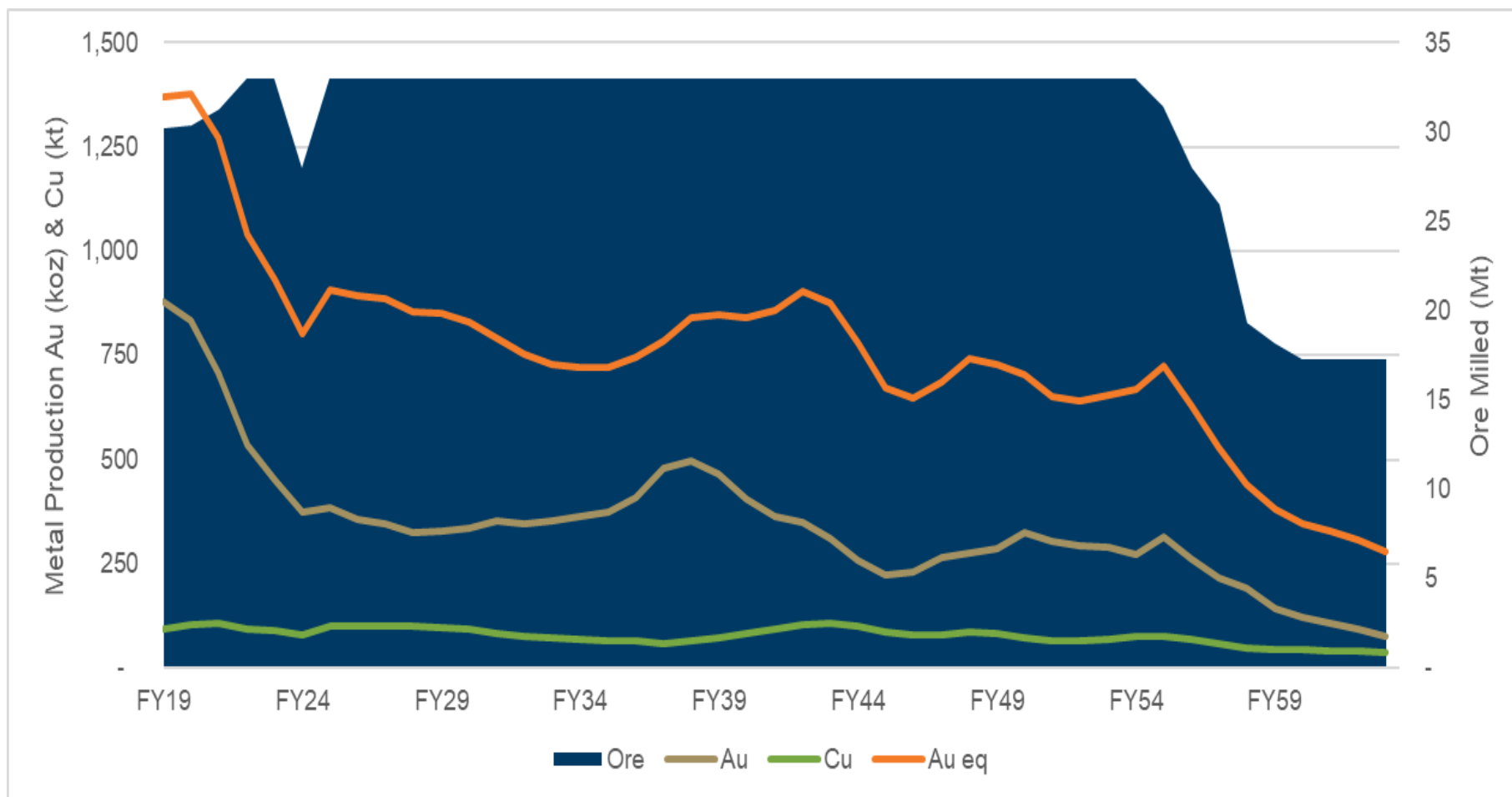
Project capital: \$ 598m  
 - Plant expansion: \$ 58m  
 - PC2-3 development: \$ 540m

IRR: 21%  
 Payback (years): 8  
 NPV: \$887m



1 Estimates were prepared to a Prefeasibility Study level with the objective of being subject to an accuracy range of  $\pm 25\%$ . The estimates are subject to completion of the Feasibility Study, all necessary permits, internal and regulatory requirements and Board approval. The estimates are indicative only and should not be construed as guidance.  
 2 The production target underpinning the forecast financial information is contained in the graphs on this slide and is based on utilisation of 100% of the Cadia East Ore Reserves. Refer to slides 77 and 78 for the Cadia East Ore Reserves as at 31 December 2018 but note that such figures are subject to depletions for the period from 1 January 2019.

# Cadia Gold, Copper & Gold Equivalent production<sup>1,2,3</sup>

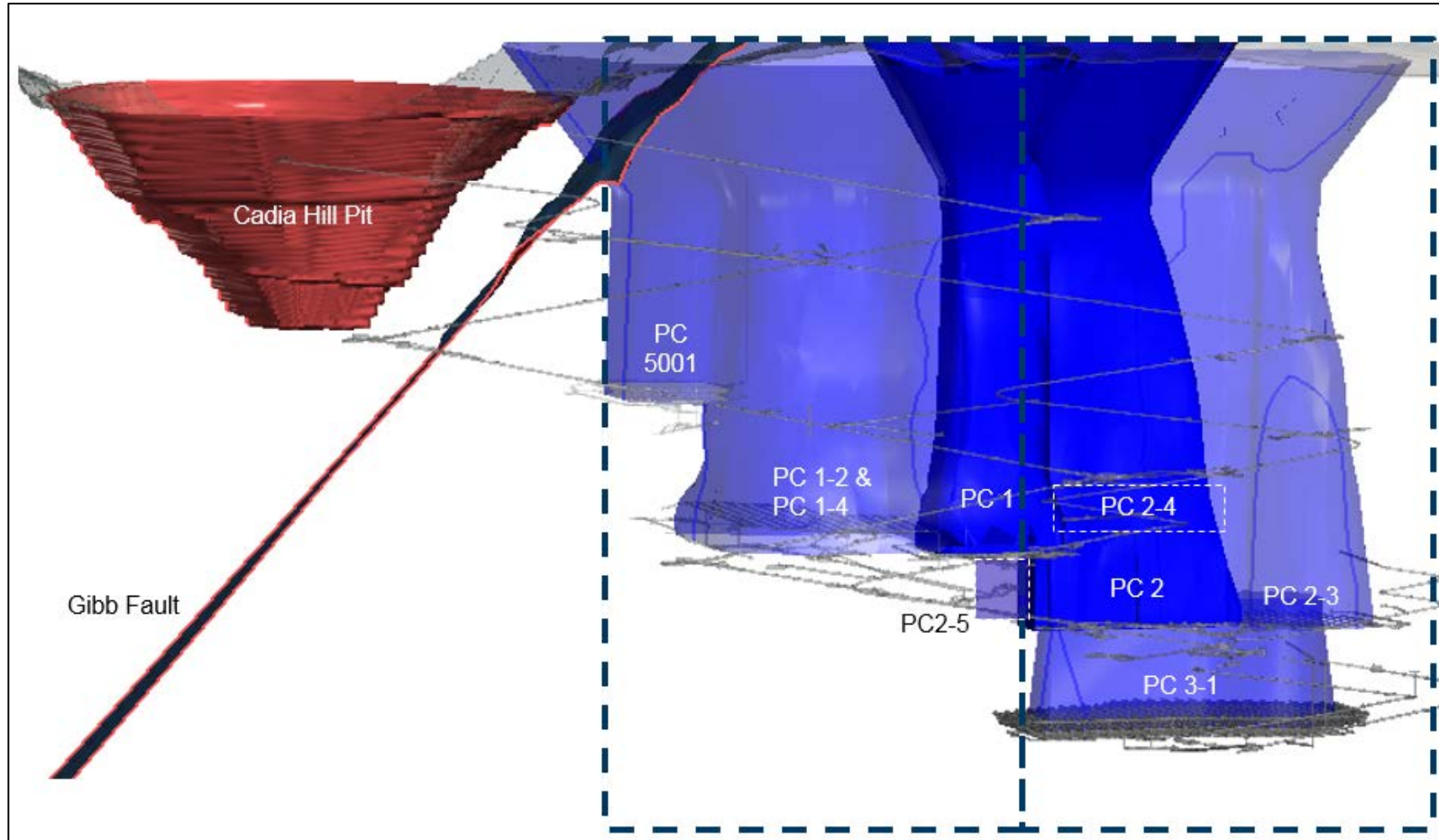


1 Estimates were prepared to a Prefeasibility Study level with the objective of being subject to an accuracy range of  $\pm 25\%$ . The estimates are subject to completion of the Feasibility Study, all necessary permits, internal and regulatory requirements and Board approval. The estimates are indicative only and should not be construed as guidance.

2 Assumptions include: Gold price of US\$1,200/oz, copper price of US\$3.00/lb, AUD:USD exchange rate of 0.75. Recovered Gold & Copper Production as provided in the chart above as indicative of the forward metal sales profile. Gold-equivalent production (by-product basis) = Recovered Au oz+ (Cu Price \$US/lb) x 2204.62 / (Au Price US\$/oz) x (Recovered copper tonnes as provided in the chart above, as indicative of the forward production profile). Gold grades are as set out in the indicative mine production profile on slide 33. Based on LOM Au recovery of approximately 72% and approximately 84% for Cu. In the Company's opinion, all elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

3 The production target underpinning the forecast financial information is contained in the graphs on this slide and is based on utilisation of 100% of the Cadia East Ore Reserves. Refer to slides 77 and 78 for the Cadia East Ore Reserves as at 31 December 2018 but note that such figures are subject to depletions for the period from 1 January 2019.

# Indicative Cadia panel cave development<sup>1</sup>

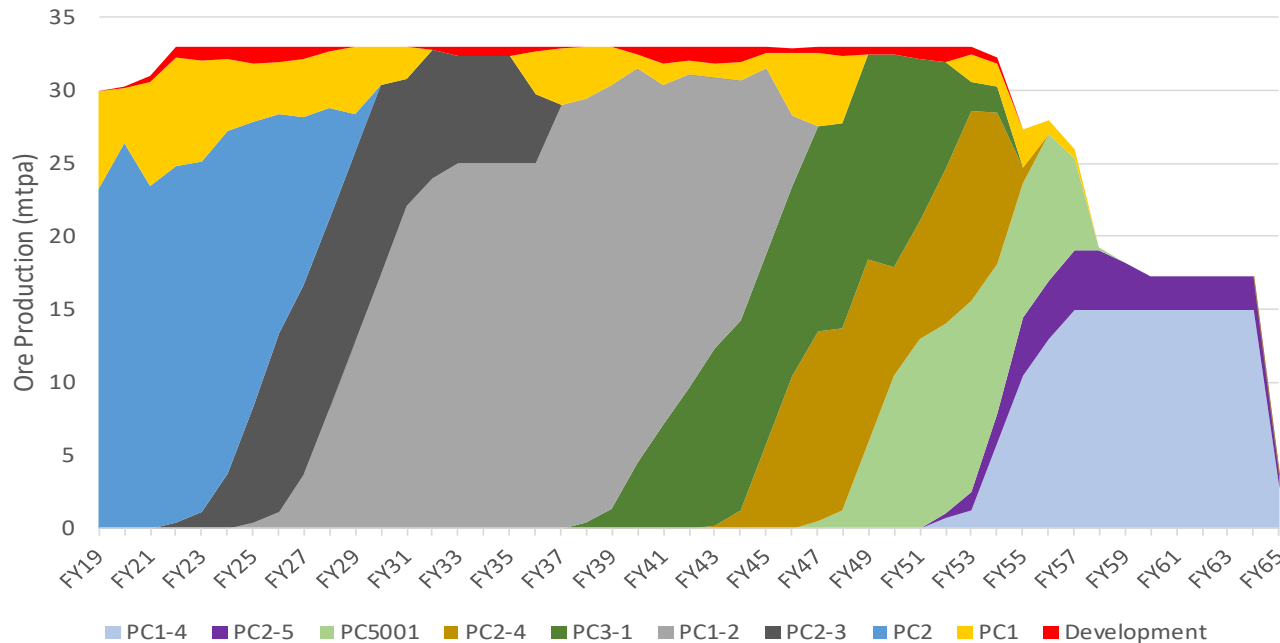


<sup>1</sup> Diagram is taken from the Prefeasibility Study, which was prepared with the objective of being subject to an accuracy range of  $\pm 25\%$ . Panel cave development is subject to completion of the Feasibility Study, all necessary permits, internal and regulatory requirements and Board approval.



# Cadia's indicative cave production schedule<sup>1,2</sup>

Panel Cave	Start Construction	First production	Ore (mt)
PC2-3	FY19	FY22	122
PC1-2	FY21	FY25	401
PC3-1	FY36	FY38	153
PC2-4	FY42	FY43	106
PC5001	FY44	FY47	93
PC1-4	FY48	FY52	154
PC2-5	FY49	FY52	35



1 Estimates were prepared to a Prefeasibility Study level with the objective of being subject to an accuracy range of  $\pm 25\%$ . The estimates are subject to completion of the Feasibility Study, all necessary permits, internal and regulatory requirements and Board approval. The estimates are indicative only and should not be construed as guidance.

2 The production target underpinning the forecast financial information is contained in the graphs on slide 29 and is based on utilisation of 100% of the Cadia East Ore Reserves. Refer to slides 77 and 78 for the Cadia East Ore Reserves as at 31 December 2018 but note that such figures are subject to depletions for the period from 1 January 2019.

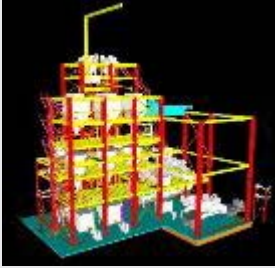
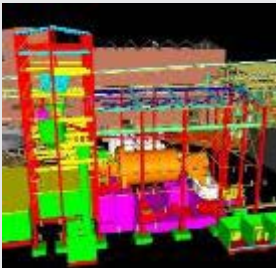
# Cadia – Pre-Feasibility Study Indicative mine plan<sup>1,2,3,4</sup>

Timing (Years)	Total material movement (Mt)	Plant Feed (Mt)	Average Gold grade (g/t)	Average Copper grade (%)
FY20 - 22	~94	~93	0.9	0.4
FY23 - 25	~99	~94	0.6	0.3
FY26 - 28	~99	~99	0.5	0.4
FY29 - 31	~99	~99	0.5	0.3
FY32 - 34	~99	~99	0.5	0.3
FY35 - 37	~99	~99	0.5	0.2
FY38 - 40	~99	~99	0.6	0.3
FY41 - 43	~99	~99	0.5	0.4
FY44 - 46	~99	~99	0.3	0.3
FY47 - 49	~99	~99	0.4	0.3
FY50 - 52	~99	~99	0.4	0.2
FY53+	Remaining Ore Reserves if any, subject to ongoing study			

- 1 Estimates were prepared to a Prefeasibility Study level with the objective of being subject to an accuracy range of  $\pm 25\%$ . The estimates are subject to completion of the Feasibility Study, all necessary permits, internal and regulatory requirements and Board approval. The estimates are indicative only and should not be construed as guidance. Does not include conversion of any Mineral Resources into Ore Reserves.
- 2 The production target underpinning the forecast financial information is contained in the graphs on slide 29 and is based on utilisation of 100% of the Cadia East Ore Reserves. Refer to slides 77 and 78 for the Cadia East Ore Reserves as at 31 December 2018 but note that such figures are subject to depletions for the period from 1 January 2019.
- 3 Based on the Company's knowledge and good faith assumptions as at the date of release of this presentation. The indicative mine plan will be updated on an annual basis, or sooner if there are significant changes in the underlying assumptions.
- 4 Indicative estimates are provided on a Base Case basis. Further optionality and upside exists in relation to the operation, with there being a number of projects and studies in progress to pursue these

# Cadia Life of Mine recovery improvement options<sup>1</sup>

<b>PFS Life of Mine Gold Recovery</b>	<b>72%</b>
<b>Confirmed Recovery Improvements</b> <ul style="list-style-type: none"> <li>Extended use of Jameson Cells</li> <li>Upgrades to the gravity gold circuit</li> <li>Expansion of flotation circuit</li> </ul>	3 - 4%
<b>Further Recovery Improvement Options</b> <ul style="list-style-type: none"> <li>Geometallurgical understanding at lower grades</li> <li>Traditional approach - additional Ball Mill, or</li> <li>Innovative approach - Coarse Ore Flotation</li> </ul>	2 - 3%
<b>Target Life of Mine Gold Recovery</b>	<b>~77-79%</b>

<b>Further Recovery Improvement Options</b>		
<b>Option</b>	<b>Innovative Coarse Ore Flotation</b>	<b>Traditional Ball Mill</b>
		
Estimated Additional Recovery	~2%	~2%
Indicative Capital Cost	~\$70M	~\$70M
Operating Cost	Low	High
Advantages	Energy efficient Low operating cost Small footprint	Proven technology Operational synergies
Challenges	New to gold industry, limited operational history	High operating cost Increased power demand

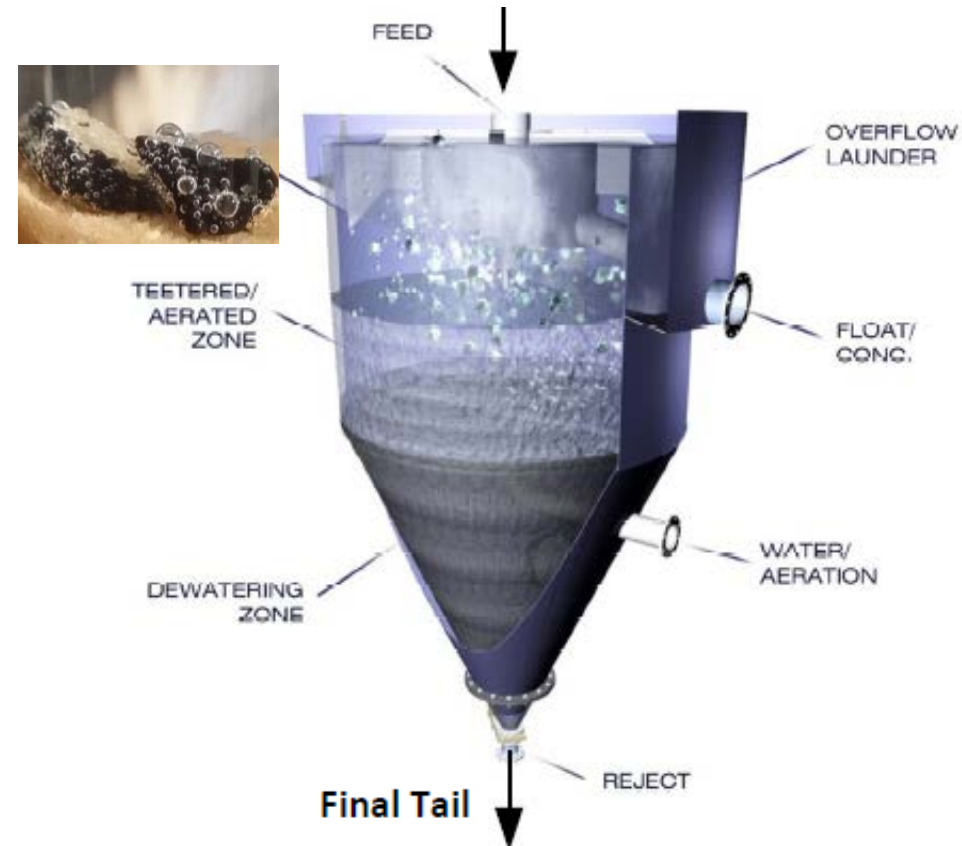
<sup>1</sup> Subject to ongoing Feasibility Study. Based on 33mtpa throughput rate.



# Selective Processing<sup>1</sup>

## Coarse Ore Flotation

- Coarse Ore Flotation is an aerated fluidized-bed separator that has demonstrated increased recovery of coarse particles compared to conventional flotation technology
- The Coarse Ore Flotation circuit treats the full flotation tailings stream from Train 3 (T3) of the Concentrator 1 flotation circuit at Cadia (~9Mtpa)
- The primary objective of the project is to recover gold and copper currently lost to T3 tailings in coarse composite particles (+150  $\mu\text{m}$ ), without additional power input for particle size reduction





# NextGen HydroMet

## Molybdenum Plant Update

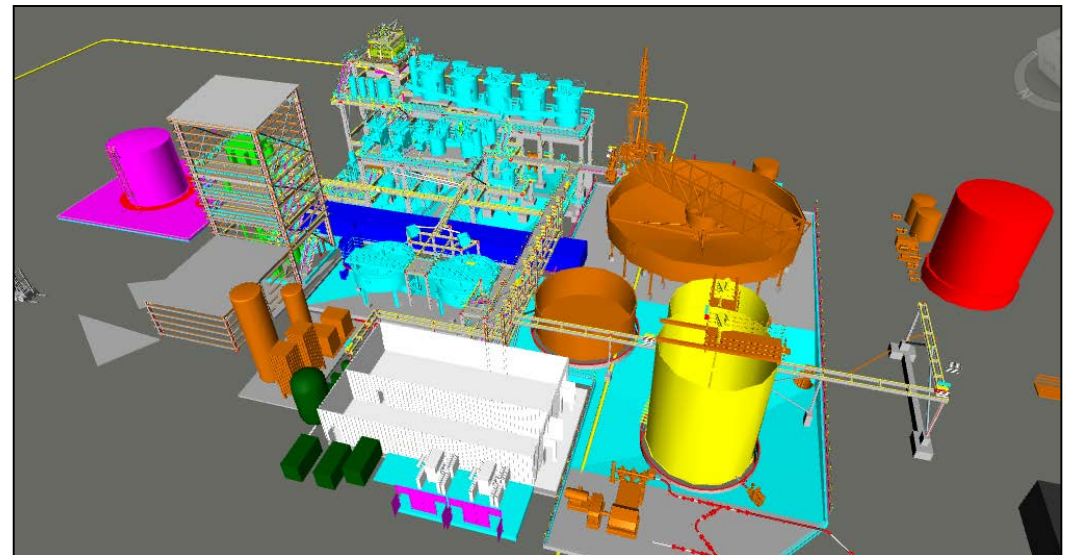
### Feasibility Study completed:

- Design of a molybdenum separation plant expected to generate ~6,500tpa of 52% molybdenum concentrate with a 92% recovery
- Shipping and logistics parameters confirmed
- Full load Commissioning expected to be completed – FY22<sup>1</sup>

### FS Key Findings<sup>1,2,3</sup>

IRR:	14.5%
Capital cost:	~\$95m
First production:	CY 2021
Estimated By-product credit:	around \$50/oz

### Indicative Plant Layout



1 Subject to market and operating conditions  
2 Estimates were prepared to a Feasibility Study level with the objective of being subject to an accuracy range of  $\pm 15\%$ . Molybdenum is not disclosed in Newcrest's Reserves & Resources statement, and production average is indicative only and should not be construed as guidance. Additional confirmatory work is required to support molybdenum mineralogy understanding and predictability of molybdenum recovery and grade.  
3 AISC calculated assuming average molybdenum production of 4.1m lb p.a with a range of between 80-7000ppm

# Northern Tailings Storage Facility (NTSF)

- No significant movement in embankment detected since event
- Independent Technical Review Board (ITRB) report released in April 2019
- In consultation with NSW Regulators, Newcrest will adopt all recommendations of the report
- Concept study into repair plans for the NTSF is due in the December 2019 quarter

ITRB recommendation	Newcrest response
<p><b>Continue to work on ensuring that the design and maintenance of the foundations take into account any weak material comparable to that in the area of the NTSF slump, as well as the limited drainage within the body of both the NTSF and Southern Tailings Storage Facility (STSF) and the potential for liquefaction of the tailings</b></p>	<ul style="list-style-type: none"> <li>• Will expand and continue the significant drilling and geotechnical assessments already undertaken in relation to the STSF and NTSF to enhance understanding of the foundation of both facilities</li> <li>• Will take the factors identified by the ITRB into account for the ongoing operation, maintenance and design of future lifts of both facilities, including necessary buttressing</li> <li>• Concept study on repair plans for the NTSF is targeting completion by the end of calendar year 2019. It will incorporate the outcomes of the aforementioned programme of work</li> </ul>
<p><b>Enhance the level and type of monitoring equipment, including monitoring within the foundations of the TSFs, to ensure that the foundation is behaving as intended</b></p>	<p>Newcrest has significantly increased surface monitoring since the NTSF slump and has ordered further foundation monitoring equipment recommended by the ITRB, which is being installed (since May 2019) progressively over 2019</p>
<p><b>The design, construction and operation of upstream tailings dams should be approached with a more precautionary view</b></p>	<p>Newcrest agrees and will be taking a more precautionary view as advocated by the ITRB</p>

# Block caving fundamentals

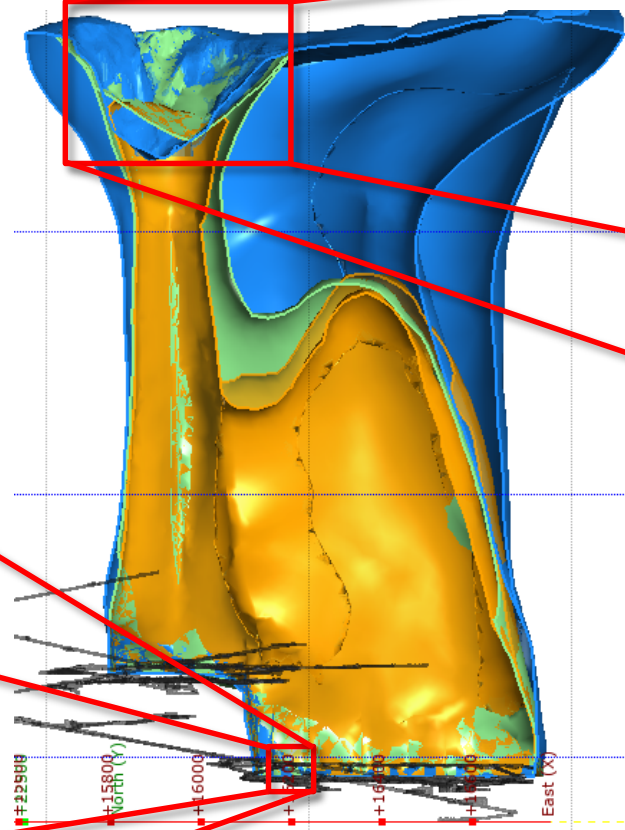
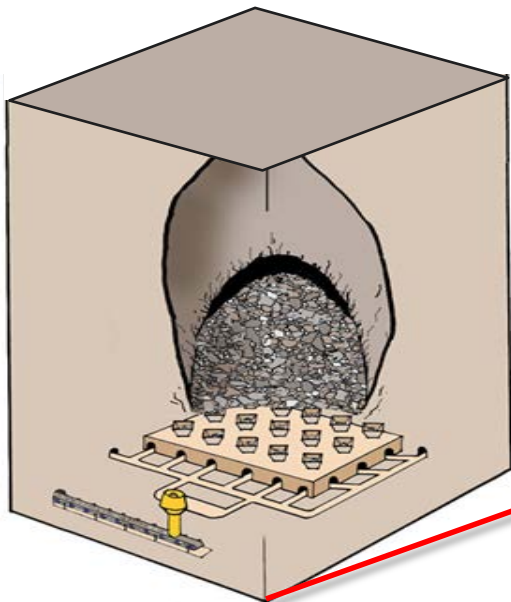
## Panel Cave 1

- ~1,200 metres deep,  
114 drawbells

## Panel Cave 2

- ~1,400 metres deep,  
165 drawbells

## Caving levels



## Subsidence zone



## Comparative surface impact





# Lihir – Strong cash flow generation



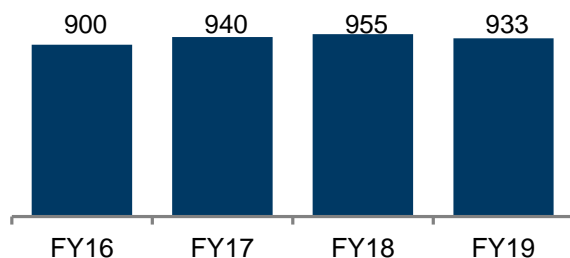
## Site Process

Element	Description
Mining	Open pit drill, blast, load and haul mining, currently in Phase 9 of Minifie Pit and Phases 14 & 15 in Lienitz. Substantial stockpiles
Processing	Crushing, grinding, flotation, pressure oxidation, NCA circuit
Output	Gold dore

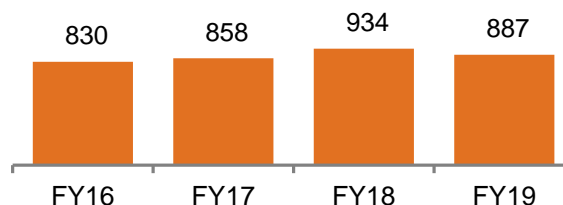
## Key Statistics

Gold Reserve Life:	~26 years <sup>1</sup>
Gold Ore Reserves:	24moz
Gold Mineral Resources:	50moz
FY20 Prod. Guidance:	930-1,030koz Au <sup>2</sup>
Q4 FY19 AISC:	\$864/oz
Q4 FY19 Production:	261koz
Workforce (FTE) <sup>3</sup> :	~2,400 employees ~3,300 contractors

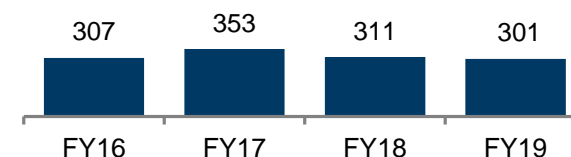
## Production (koz)



## All-In Sustaining Cost (\$/oz)



## Free Cash Flow (\$m)<sup>4</sup>



<sup>1</sup> Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) as at 31 December 2018 divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates and therefore estimate reserve life does not necessarily equate to operating mine life. Full gold mineral resources and ore reserves tables can be found on slides 75 to 78

<sup>2</sup> Achievement of guidance is subject to market and operating conditions

<sup>3</sup> At 30 June 2019. Employees are Newcrest directly employed FTEs, contractor FTEs include full time embedded contractors and project, replacement labour and other contractors

<sup>4</sup> Free cash flow is before interest and tax



# Lihir's increased throughput lowers AISC per oz



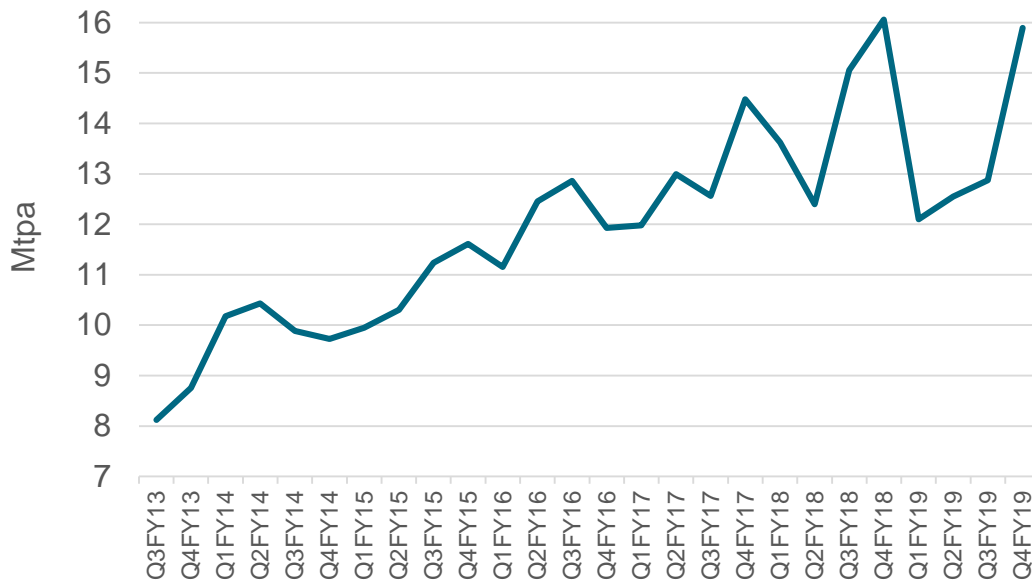
✓ Achieved with 12.4mtpa in December 2015 quarter

✓ Achieved with 13mtpa in December 2016 quarter

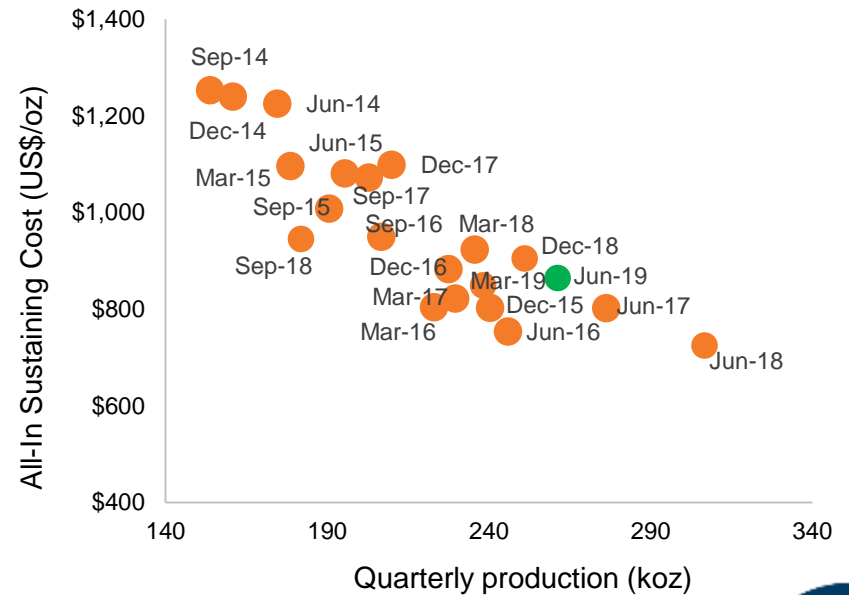
✗ Achieved with 15mtpa in March 2018 quarter

✓ Achieved with 16mtpa in June 2019 quarter

**Lihir mill throughput (quarterly data annualised)**



**AISC falls in line with increased production**



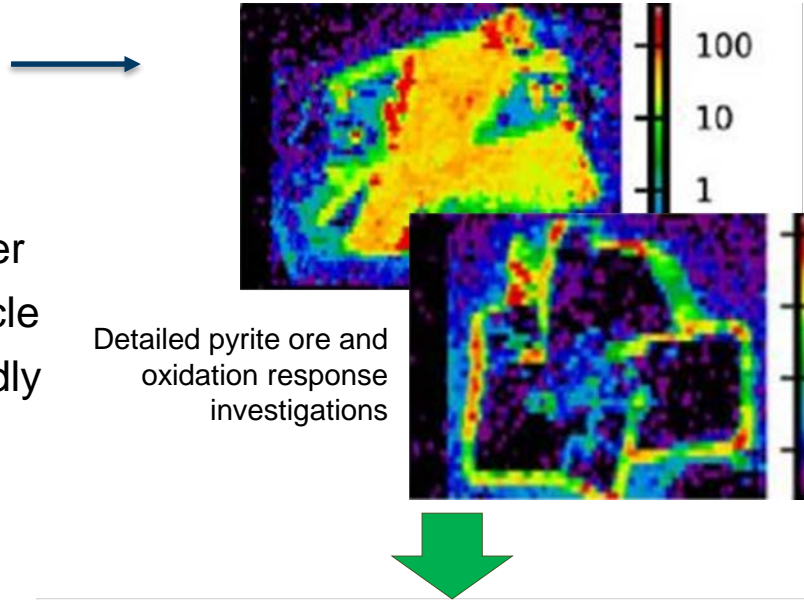


# NextGen HydroMet

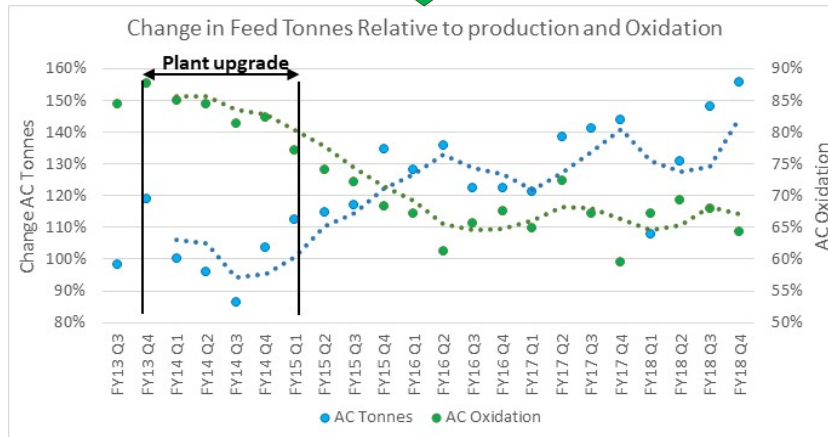
*partial oxidation strategy – delivering results*

Actively manage autoclave throughput based on sulphur content of feed to maximise gold production

Microcrystalline pyrite<sup>1</sup> – appears more reactive and generally has higher gold content. Particle oxidises more rapidly in autoclave, liberating gold relatively quickly



Crystalline (blocky) pyrite<sup>1</sup> – appears less reactive and generally has lower gold content. Gold on rim liberated first, but low grade, pyrite core takes substantially longer to oxidise in autoclave



<sup>1</sup> Shown for illustrative purposes, represent the end members of pyrite types

# Lihir - Indicative mine plan<sup>1,2,3,4,5</sup>

Timing (Years)	Sources	Total Material Moved (Mt) <sup>3</sup>	Waste (Mt)	Tonnes to Stockpiles (Mt)	Ex-pit Tonnes Fed (Mt)	Stockpile Tonnes Fed (Mt)	Plant Feed (Mt) <sup>4</sup>	Average Feed Grade g/t
FY20-24	Minifie & Lienetz, medium grade stockpiles, and pre-strip	350-360	145-155	50-55	20-25	50-55	70-80	~2.6
FY25-29	Lienetz & Kapit, medium / low grade stockpiles and pre-strip	325-335	150-160	15-20	30-35	40-45	70-80	~2.6
FY30-34	Lienetz & Kapit and low grade stockpiles	270-280	95-105	20-25	70-75	0-5	70-80	~2.5
FY35-39	Kapit and low grade stockpiles	140-150	30-40	0-5	20-25	55-60	70-80	~1.7
FY40-44	Low grade stockpiles	10-15	-	-	-	10-15	10-15	~1.5
FY45+	Remaining Ore Reserves if any, subject to ongoing study							

1 Indicative only and should not be construed as guidance. Subject to market and operating conditions, regulatory and landowner approvals and further study. See slide 77 for details as to the Ore Reserves that underpin the indicative mine plan subject to depletions for the period from 1 January 2019

2 Includes sheeting material and crusher rehandle.

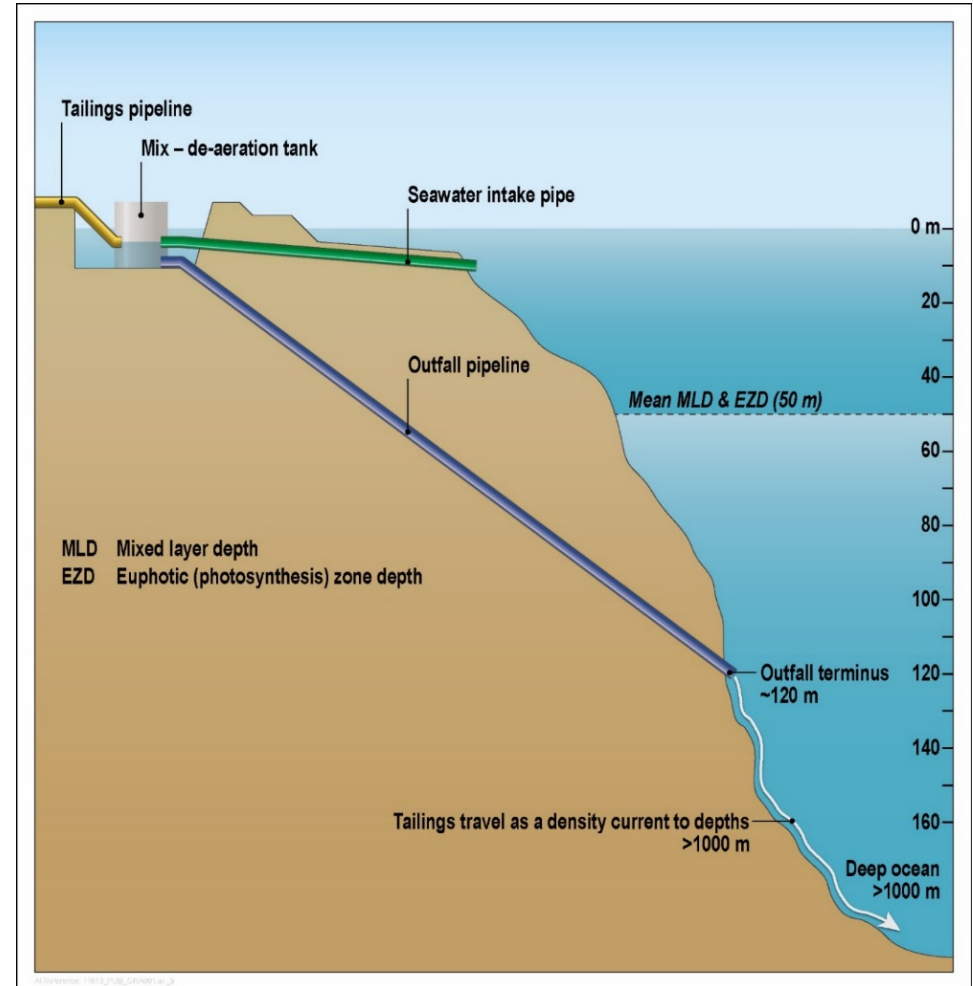
3 Plant feed = Ex-pit + Stockpile feed

4 Based on the Company's knowledge and good faith assumptions as at the date of release of this presentation. The indicative mine plan will be updated on an annual basis, or sooner if there are significant changes in the underlying assumptions

5 Indicative estimates are provided on a Base Case basis. Further optionality and upside exists in relation to the operation, with there being a number of projects and studies in progress to pursue these

# Lihir Deep Sea Tailings Placement

- Rigorous baseline studies prior to approval
- DSTP approved as the preferred tailings management option from an environmental and social point of view for Lihir which has limited space for terrestrial tailings storage and is a seismically active region
- Ongoing monitoring of DSTP under a government approved Environmental Management and Monitoring Plan
- Lihir Environmental Management System ISO14001 certified
- Detailed seabed and tailings footprint surveys every five years
- Periodic independent technical reviews (e.g. Scottish Association of Marine Science) to assess DSTP system functioning as designed and develop ongoing research projects



# Telfer – Seeking to maximise value



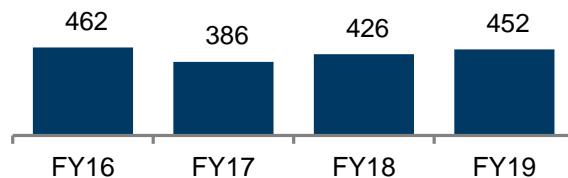
## Site Process

Element	Description
Mining	Open pit mining contracted to Macmahon  Underground sub-level cave and stope mining contracted to Byrnescut
Processing	Crushing, grinding, gravity concentration, flotation, leaching circuit
Output	Copper/ gold concentrate and gold doré

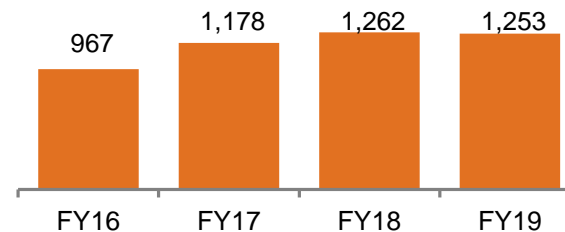
## Key Statistics

Gold Reserve Life:	~4 years <sup>1</sup>
Gold Ore Reserves:	2.0moz
Gold Mineral Resources:	6.4moz
Copper Ore Reserves:	0.20mt
Copper Mineral Resources:	0.59mt
FY20 Prod. Guidance:	400-460koz Au, ~15kt Cu <sup>2</sup>
Q4 FY19 AISC:	\$1,188/oz
Q4 FY19 Production:	116koz
Workforce (FTE) <sup>3</sup> :	~530 employees ~1,150 contractors

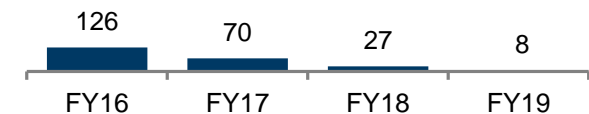
## Production (koz)



## All-In Sustaining Cost (\$/oz)



## Free Cash Flow (\$m)<sup>4</sup>



- Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) as at 31 December 2018 divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates and therefore estimate reserve life does not necessarily equate to operating mine life. Copper reserves and resources include O'Callaghans. Full gold and copper mineral resources and ore reserves tables can be found on slides 75 to 78
- Achievement of guidance is subject to market and operating conditions
- At 30 June 2019. Employees are Newcrest directly employed FTEs, contractor FTEs include full time embedded contractors and project, replacement labour and other contractors
- Free cash flow is before interest and tax

# Telfer – Indicative mine plan

## Mineral Resource & Ore Reserves<sup>1</sup>

		Gold			Copper		
		Dry Tonnes (Million)	Grade (g/t)	Insitu Gold (Moz)	Dry Tonnes (Million)	Grade (%)	Insitu Copper (Mt)
Ore Reserves	Main Dome Open Pit	9.3	0.52	0.15	9.3	0.088	0.0082
	West Dome Open Pit	63	0.75	1.5	63	0.076	0.048
	Telfer Underground	4.9	1.9	0.30	4.9	0.29	0.014
	O'Callaghans				44	0.29	0.13
	<b>Total</b>			<b>2.0</b>			<b>0.20</b>
Mineral Resources	Main Dome Open Pit	24	0.60	0.46	24	0.092	0.022
	West Dome Open Pit	150	0.63	3.1	150	0.062	0.095
	Telfer Underground	50	1.6	2.7	50	0.40	0.20
	Other	4.9	1.3	0.20	14	0.37	0.052
	O'Callaghans				78	0.29	0.22
	<b>Total</b>			<b>6.4</b>			<b>0.59</b>

## Cutback Timetable FY20 onwards<sup>2,3,5</sup>

Timing (years)	Pit	Cutback Stage	Indicative Cost
FY20	Main Dome	Stage 6/7	\$0m
FY20-23	West Dome	Stage 2 Final	\$0m
FY20-23	West Dome	Stage 3 Final	\$30-40m

## Proposed indicative development of Telfer mining operations<sup>2,4</sup>

Timing (years)	Total material moved open cut	Open pit ore mined	Open pit gold grade	Open pit copper grade	Total material moved underground	Underground ore mined	Underground gold grade	Underground copper grade
FY20-21	90-105mt	45-53mt	~0.6g/t	~0.07%	2.9-3.4mt	2.8-3.3mt	~1.8g/t	~0.28%

FY22+ Remaining Ore Reserves if any, subject to ongoing studies

- As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018. Full mineral resources and ore reserves tables can be found on slides 75 to 78
- Indicative only and should not be construed as guidance. Subject to market and operating conditions. See slides 77 and 78 for details for the Ore Reserves that underpin the indicative mine plan subject to depletions for the period from 1 January 2019
- Indicative cost based on estimated capital stripping costs only required, in FY20 real dollars.
- Based on the Company's knowledge and good faith assumptions as at the date of release of this presentation. The indicative mine plan will be updated on an annual basis, or sooner if there are significant changes in the underlying assumptions
- Indicative Production Stripping costs denoted in USD, converted at 0.72 AUD/USD



# Technology & Innovation at Telfer

## Breakthrough challenge:

Extend Telfer's life through step change technologies that materially improve cost base and product quality

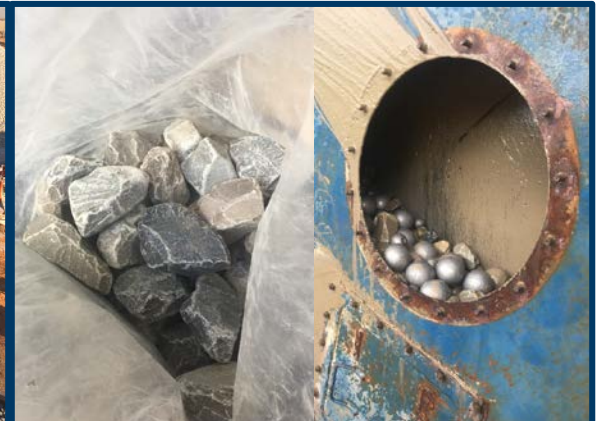
## Value capture levers being explored

- Particle sorting & screening
- Pebbles as grinding media
- Mass sensing & sorting
- Hydromet testwork



**Particle sorting & screening**

*Trials nearing completion*



**Pebbles as grinding media**

*Partial replacement of steel balls*



**Mass sensing & sorting**

*PGNAA trial*



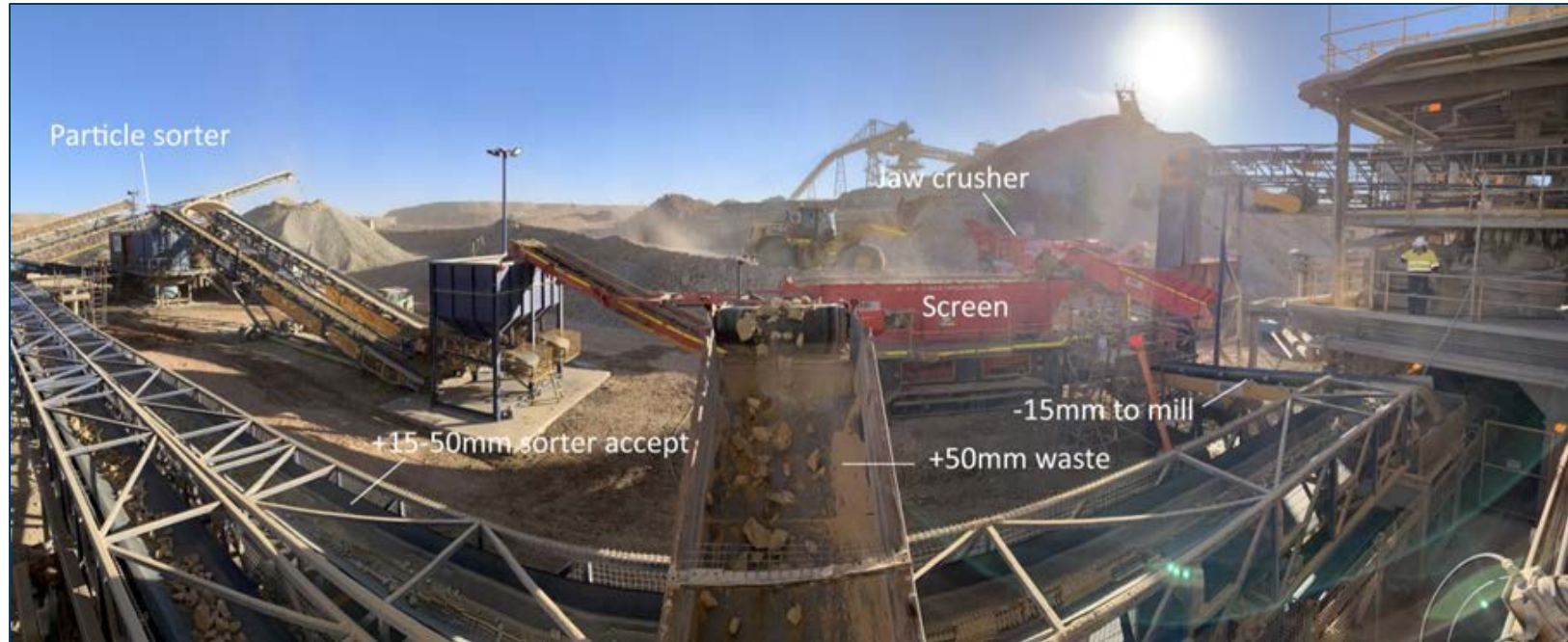
**Hydromet testwork**

*Improved concentrate treatment*



# Telfer - Selective Processing- Screening

*A system changing focus*



- A pilot plant trial has been completed over a 3 month period to assess the potential opportunity of screening Telfer's lower grade and mineralised waste ore sources.
- The results indicate ~80% of the gold is contained in ~50% of the mass below 50 mm. This implies a potential to reject +50mm material from the feed to the plant, along with 50% of the feed mass, with a low gold loss.
- Preliminary test and engineering works have commenced to assess whether this technology can be economically applied to the ore sources remaining at Telfer



# Telfer hedge profile

Financial Year Ending	Gold Ounces Hedged	Average Price A\$/oz
30 June 2020	204,794	1,729
30 June 2021	216,639	1,864
30 June 2022	204,615	1,902
30 June 2023	137,919	1,942
<b>Total</b>	<b>763,967</b>	<b>1,852</b>

\*During FY19 Newcrest realised 231,224 ounces of Telfer gold sales hedged at an average price of A\$1,739 per ounce, representing a net revenue loss of \$3m. Since the hedging program commenced in FY16, the net revenue benefit up to and including FY19 has been \$33m.

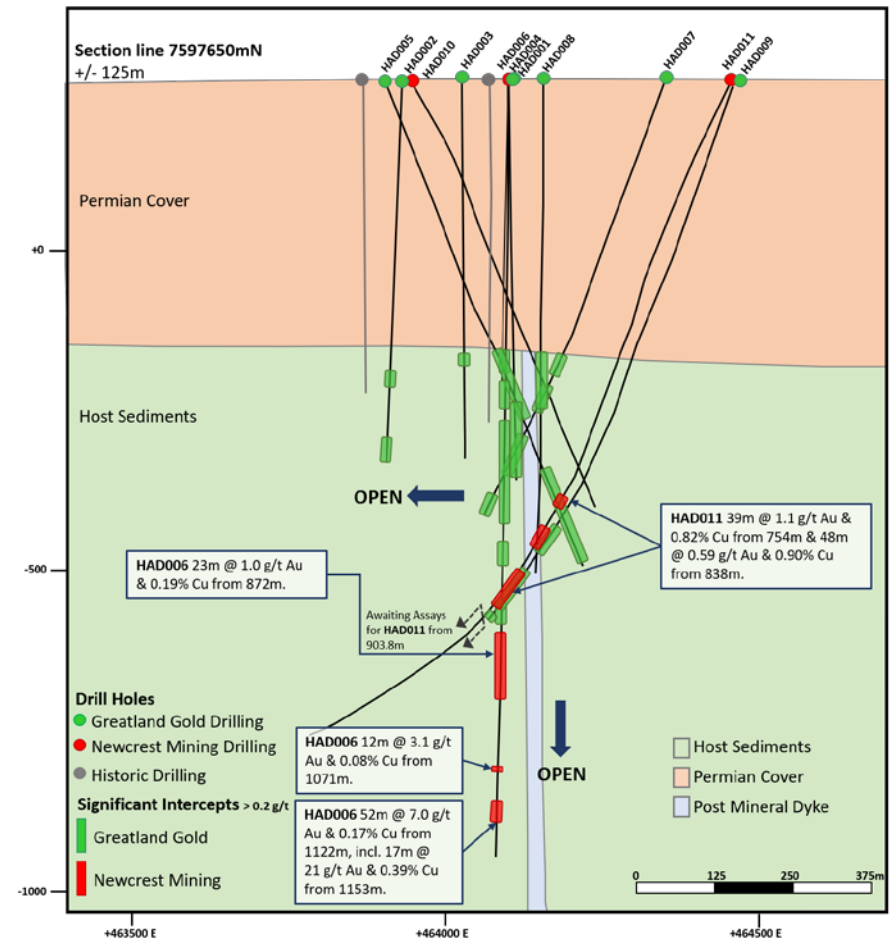


Telfer is a large scale, low grade mine and its profitability and cashflow are both very sensitive to the realised Australian Dollar gold price

# Havieron – Opportunity for Telfer

- Farm-in agreement on the Havieron tenement with potential to deliver high grade ore feed to Telfer
- Newcrest to manage the exploration program
- \$5m minimum commitment over initial 12 months, with potential to earn 70% JV interest through expenditure of \$65m over a 6 year period
- Option to earn an additional 5% interest at the end of the farm-in period at fair market value
- If successful:
  - Ore to be trucked to Telfer for processing
  - High grade ore could extend Telfer's life and lower its production cost per ounce

## Drill results as at 30 June 2019



# Gosowong



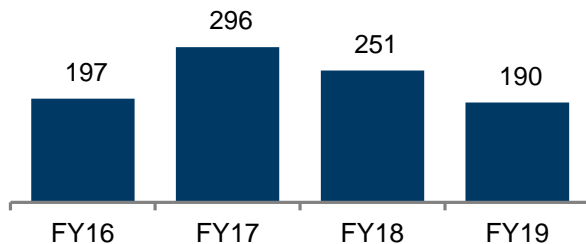
## Site Process

Element	Description
Mining	Underground mining using predominantly underhand cut-and-fill (Kencana) and long hole stopes with paste fill (Toguraci)
Processing	Crushing, grinding, gravity, leaching
Output	Gold and silver doré

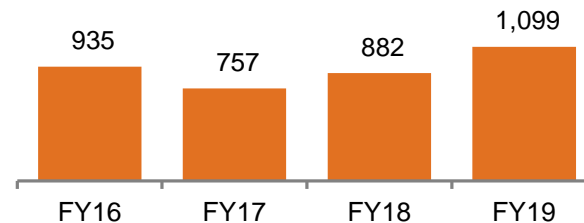
## Key Statistics<sup>1</sup>

Gold Reserve Life:	~2 years <sup>2</sup>
Gold Ore Reserves:	0.37 moz
Gold Mineral Resources:	1.1 moz
FY20 Prod. Guidance:	145-175koz Au <sup>3</sup>
Q4 FY19 AISC:	\$1,142/oz
Q4 FY19 Production:	43koz
Workforce (FTE) <sup>4</sup> :	~920 employees ~960 contractors

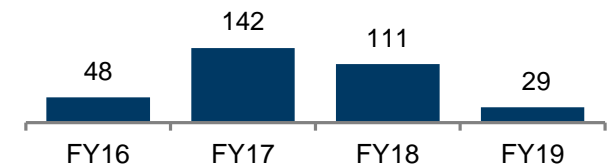
## Production (koz)



## All-In Sustaining Cost (\$/oz)



## Free Cash Flow (\$m)<sup>5</sup>



- The figures shown represent 100%. Newcrest owns 75% of Gosowong through its holding in PT Nusa Halmahera Minerals, an incorporated joint venture
- Reserve life is indicative and calculated as proven and probable gold reserves (contained metal) as at 31 December 2018 divided by gold production for the 12 months ended 30 June 2019. The reserve life calculation does not take into account future gold production rates and therefore estimate reserve life does not necessarily equate to operating mine life. Full gold mineral resources and ore reserves tables can be found on slides 75 to 78
- Achievement of guidance is subject to market and operating conditions
- At 30 June 2019. Employees are Newcrest directly employed FTEs, contractor FTEs include full time embedded contractors and project, replacement labour and other contractors
- Free cash flow is before interest and tax

# Gosowong – Indicative mine plan

## Mineral Resource & Ore Reserves<sup>1</sup>

	Dry Tonnes (millions)	Gold		Silver	
		Grade (g/t)	Insitu Gold (Moz)	Grade (g/t)	Insitu Silver (Moz)
Ore Reserves	1.4	8.1	0.37	12	0.54
Mineral Resources	3.3	10	1.1	14	1.5

## Proposed indicative development of Gosowong mining operations<sup>2,3</sup>

Timing (years)	Total material moved	Kencana ore mined	Kencana gold grade	Kencana silver grade	Toguraci ore mined	Toguraci gold grade	Toguraci silver grade
FY20	0.91 – 0.92 Mt	345 - 350 kt	~6.7 g/t	~7.4 g/t	275 - 280 kt	~10.5 g/t	~20.7 g/t
FY21	0.60 – 0.61 Mt	275 - 280 kt	~7.7 g/t	~6.4 g/t	180 - 185 kt	~13.5 g/t	~24.9 g/t
FY22+	Remaining Ore Reserves if any, subject to ongoing study						

- 1 As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018. Full mineral resources and ore reserves tables can be found on slides 75 to 78
- 2 Indicative only and should not be construed as guidance. Subject to market and operating conditions. Any development beyond 2019 is subject to Board approval. See slide 77 for details as to the ore reserves that underpin the indicative mine plan subject to depletions for the period from 1 January 2019
- 3 Based on the Company's knowledge and good faith assumptions as at the date of release of this presentation. The indicative mine plan will be updated on an annual basis, or sooner if there are significant changes in the underlying assumptions

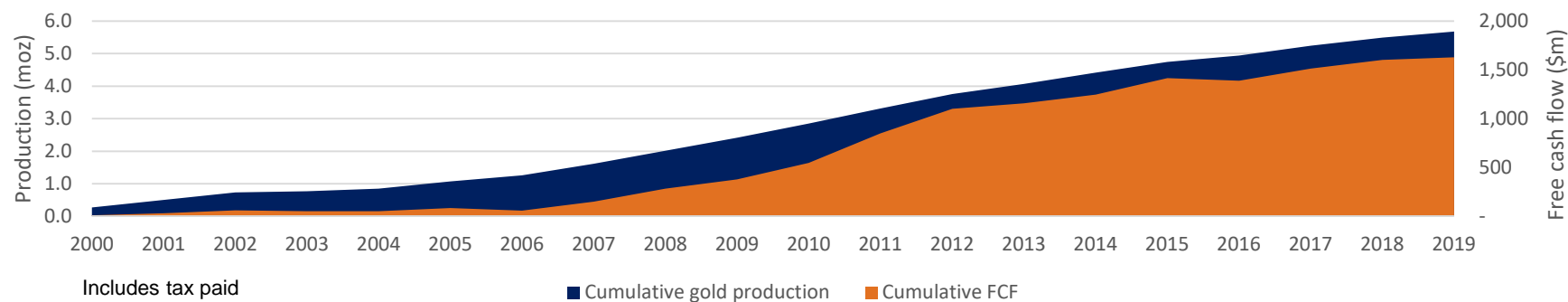
# Gosowong – \$1.6bn<sup>1</sup> free cash flow generated

- High grade world-class epithermal province discovered by Newcrest geologists in 1993
- Gosowong has performed reliably and consistently while delivering high margins
- Over 5.6moz gold produced and ~\$1.6bn free cash flow generated since first full year of production in 2000
- Gosowong's strong free cash flow demonstrates potential value of epithermal mines – justifying exploration strategy
- As announced on 26 June 2018, Newcrest's 75% owned Indonesian subsidiary, PT Nusa Halmahera Minerals (PT NHM), entered into an agreement with the Government of Indonesia to amend the Gosowong Contract of Work (CoW).

A key amendment to the CoW included a requirement that Indonesian parties own at least 51% of PTNHM within two years of signing the amendment agreement.

Newcrest has commenced a process aimed at ensuring divestment of at least a 26% interest from its current shareholding percentage of 75%.

Generated \$1.6bn free cash since first production





# Red Chris – Potential Tier 1 orebody<sup>1,2</sup>



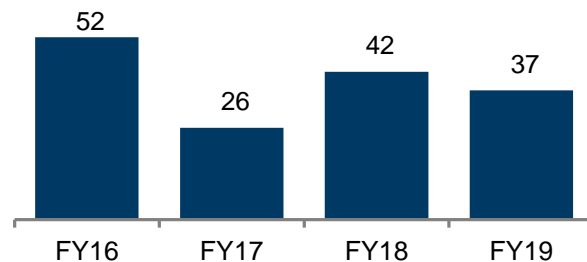
## Site Process

Element	Description
Mining	Open pit mining (currently) Block Cave (potentially) <sup>3</sup>
Processing	Crushing, grinding, flotation
Output	Gold, copper and silver

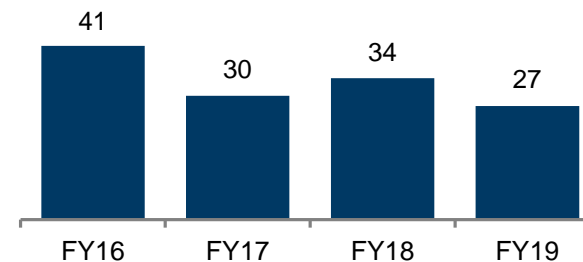
## Key Statistics<sup>1,2</sup>

Gold Mineral Resource:	20moz
Copper Mineral Resource:	13blb
Q4 FY19 Production:	7.6koz Au & 8.0kt Cu

## Gold Production (koz)



## Copper Production (kt)



- The figures shown represent 100% production under Imperial. As at 15 August 2019, Newcrest owns 70% of Red Chris in an incorporated joint venture with Imperial.
- The information on this slide that relates to the Red Chris Mineral Resource estimates is based on the “National Instrument 43-101 Technical Report” dated 30 September 2015 and filed by Imperial on SEDAR ([www.sedar.com](http://www.sedar.com)) in accordance with National Instrument 43-101 as required by Canadian securities regulatory authorities. The estimates of the Imperial Mineral Resources contain Measured and Indicated Mineral Resources of 1.0Bt at 0.35 g/t Au and 0.35% Cu for 12Moz contained gold and 8.0Blb contained copper and Inferred Mineral Resources of 0.7Bt at 0.32 g/t Au and 0.29% Cu for 8.1Moz contained gold and 5.0Blb contained copper (Data reported to two significant figures and this may cause discrepancies in totals). See also Red Chris foreign estimates in the disclaimers of this presentation.
- Subject to market and operating conditions, further drilling and study, all necessary permits, regulatory requirements and Board approvals.

# Red Chris – Two stage transformation

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## Stage 1 - Apply Newcrest's Edge transformation approach

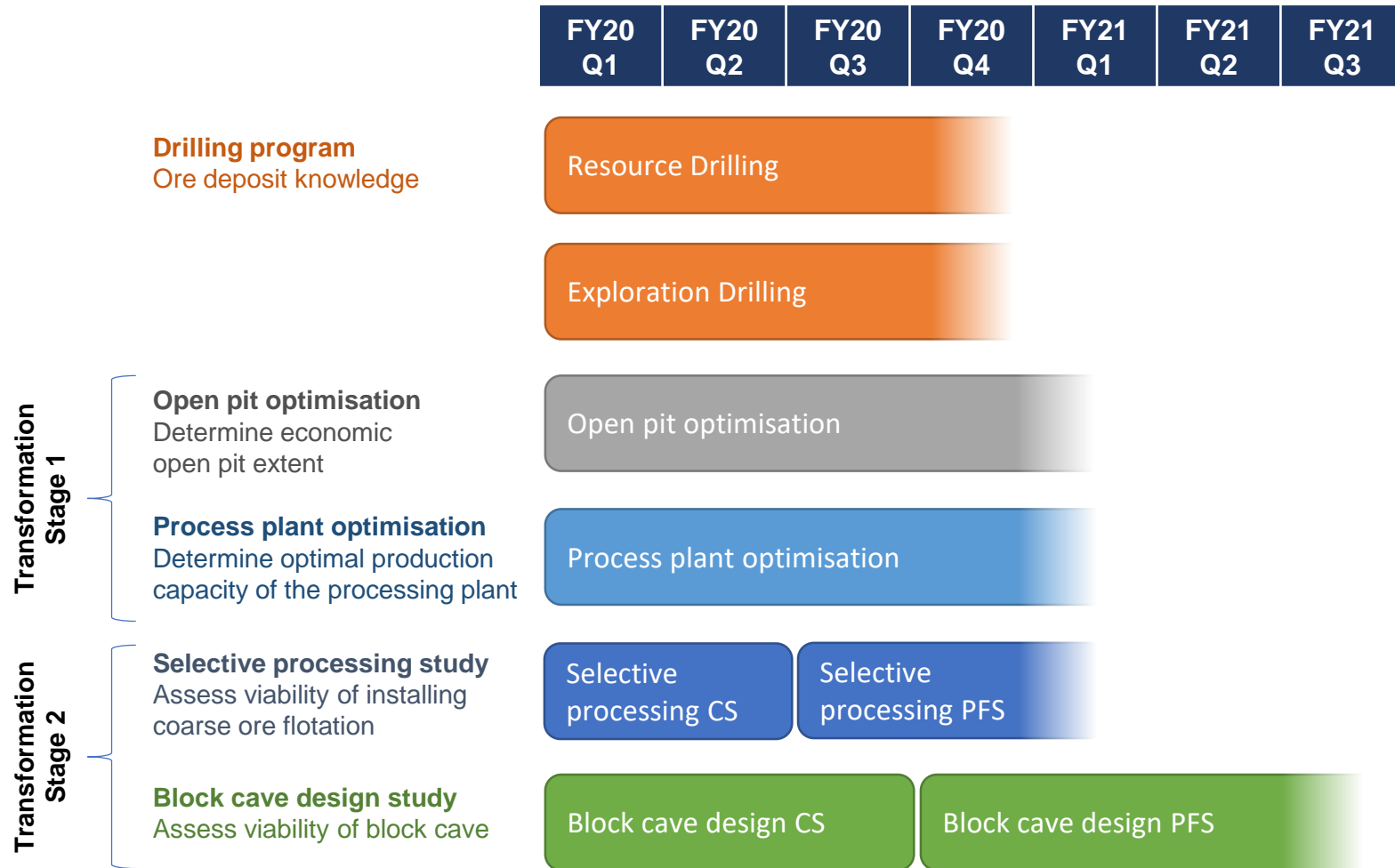
- Process plant optimisation
- Mine optimisation
- Supply chain cost reduction
- Extensional resource and exploration drilling program

## Stage 2 - Apply Newcrest's industry leading technology

- Block caving
- Coarse ore flotation
- Mass sensing and sorting
- Deep underground brownfield and greenfield exploration

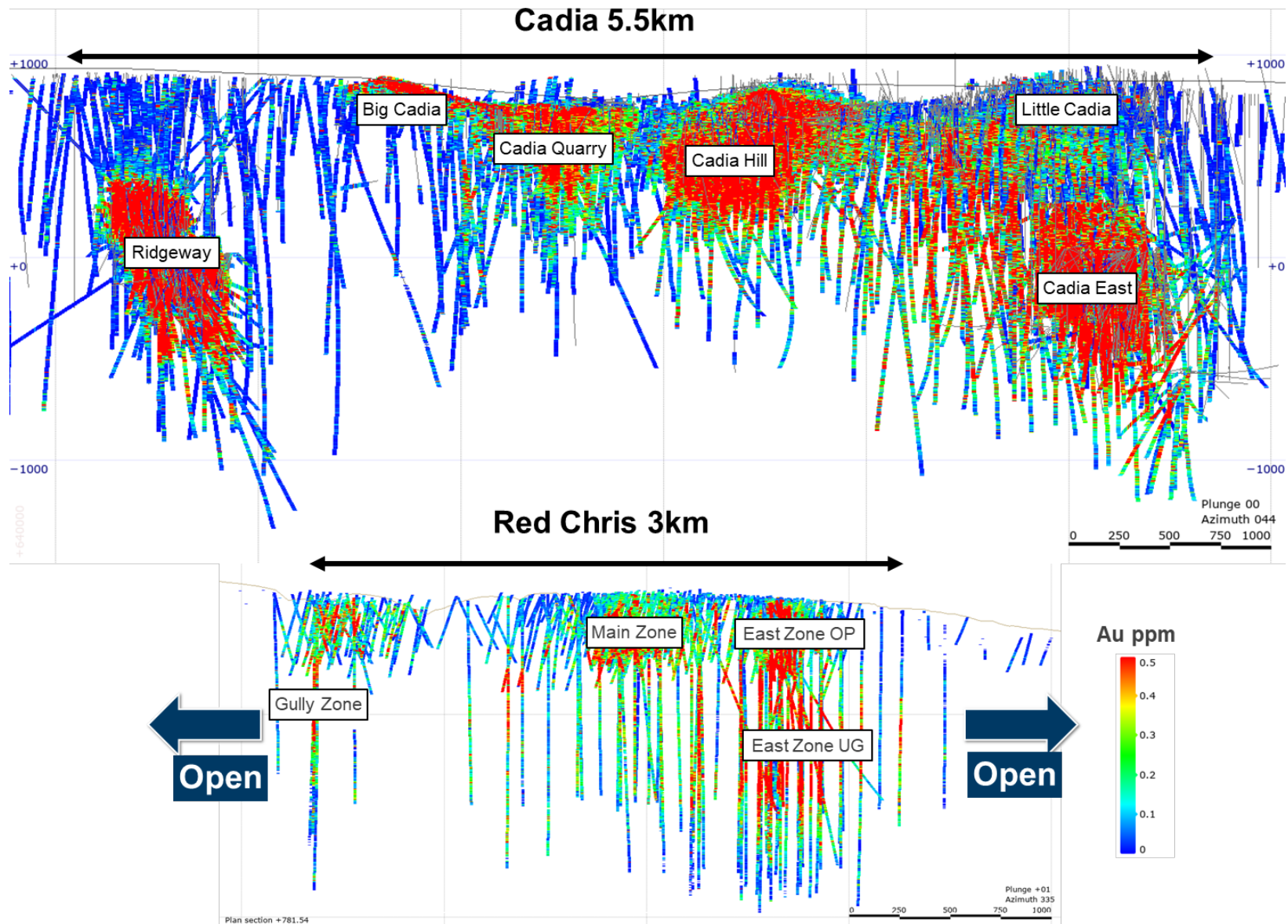


# Forward work plan





# Significant exploration upside potential





# Wafi-Golpu – Updated Feasibility Study<sup>1</sup>

## Key Statistics – Golpu<sup>2</sup>

<b>Gold Ore Reserves:</b>	5.5 moz	<b>IRR<sup>3</sup>:</b>	~18.2% (real)	<b>Avg. copper grade:</b>	1.27%
<b>Gold Mineral Resources:</b>	9.3 moz	<b>NPV:</b>	~\$2.6bn (real)	<b>Avg. gold grade:</b>	0.9 g/t
<b>Copper Ore Reserves:</b>	2.5 mt	<b>Payback:</b>	~9.5 years from commencement of earthworks for declines	<b>Avg. annual copper production:</b>	161kt
<b>Copper Mineral Resources:</b>	4.3 mt	<b>Max Ore throughput:</b>	17mtpa	<b>Avg. annual gold production:</b>	266koz
<b>Location:</b>	65km south-west of Lae	<b>Expected first ore:</b>	~4.75 years from grant of Special Mining Lease	<b>Gold recoveries:</b>	68%
<b>Permitting:</b>	Special Mining Lease application submitted, working through associated approval processes	<b>Life of Mine<sup>4</sup>:</b>	28 years	<b>Copper recoveries:</b>	95%
<b>Newcrest Ownership:</b>	50% (if government exercises full option, Newcrest's ownership would reduce to 35%)	<b>Max cumulative negative free cashflow<sup>5</sup>:</b>	\$2,823m	<b>Total operating cost<sup>6</sup> (real):</b>	\$17.33 per tonne
<b>Mining style:</b>	Block cave	<b>Free cash flow generation:</b>	\$13,157m	<b>Cash cost (C1) (copper-basis)<sup>7</sup>:</b>	\$0.26 per lb
				<b>All-In Sustaining Cost (gold basis):</b>	\$(2,128) per ounce

<sup>1</sup> See release dated 19 March 2018 for further details, including conditions to progression. These figures are estimates from the updated Feasibility Study (as at 19 March 2018) and as such were prepared with the objective of being subject to an accuracy range of  $\pm 15\%$ , with the exception of block cave 40 (due to limited geotechnical data; further work is planned to obtain orebody data to confirm rock strength across the BC40 footprint) and associated infrastructure which was prepared with a prefeasibility accuracy range of  $\pm 25\%$ . As timing for finalisation of the SML or a suitable fiscal and stability framework and supporting arrangements is uncertain, valuation outcomes are shown at the time of commencement of earthworks for the access Nambonga decline. Costs are based on December 2017 real estimates. Neither the costs nor real cost escalation impacts prior to commencement of earthworks are included in the valuation outcomes. The figures are subject to all necessary permits, regulatory requirements and Board approval and further works. The production target utilises 98% of the full project's probable Ore Reserves contained metal. The production target underpinning the forecast financial information is contained in the graphs and tables on slides 58 to 59. Assumptions include: Gold price of US\$1,200/oz, copper price of US\$3.00/lb, AUD:USD exchange rate of 0.75 and USD:PGK exchange rate of 3.10

<sup>2</sup> Ore Reserves and Mineral Resources based on Newcrest's 50% ownership share of Golpu. For Golpu Ore Reserves refer to market release titled "Update Wafi-Golpu Feasibility Study" dated 19 March 2018 and "Supplementary Data on Updated Wafi-Golpu Feasibility Study" dated 12 April 2018. For Golpu Mineral Resources refer to market release "Wafi-Golpu – Update on Stage One Feasibility and Stage Two Prefeasibility Studies" dated 15 February 2016.

<sup>3</sup> Project IRR is after all taxes but before any withholding taxes on dividends or interest

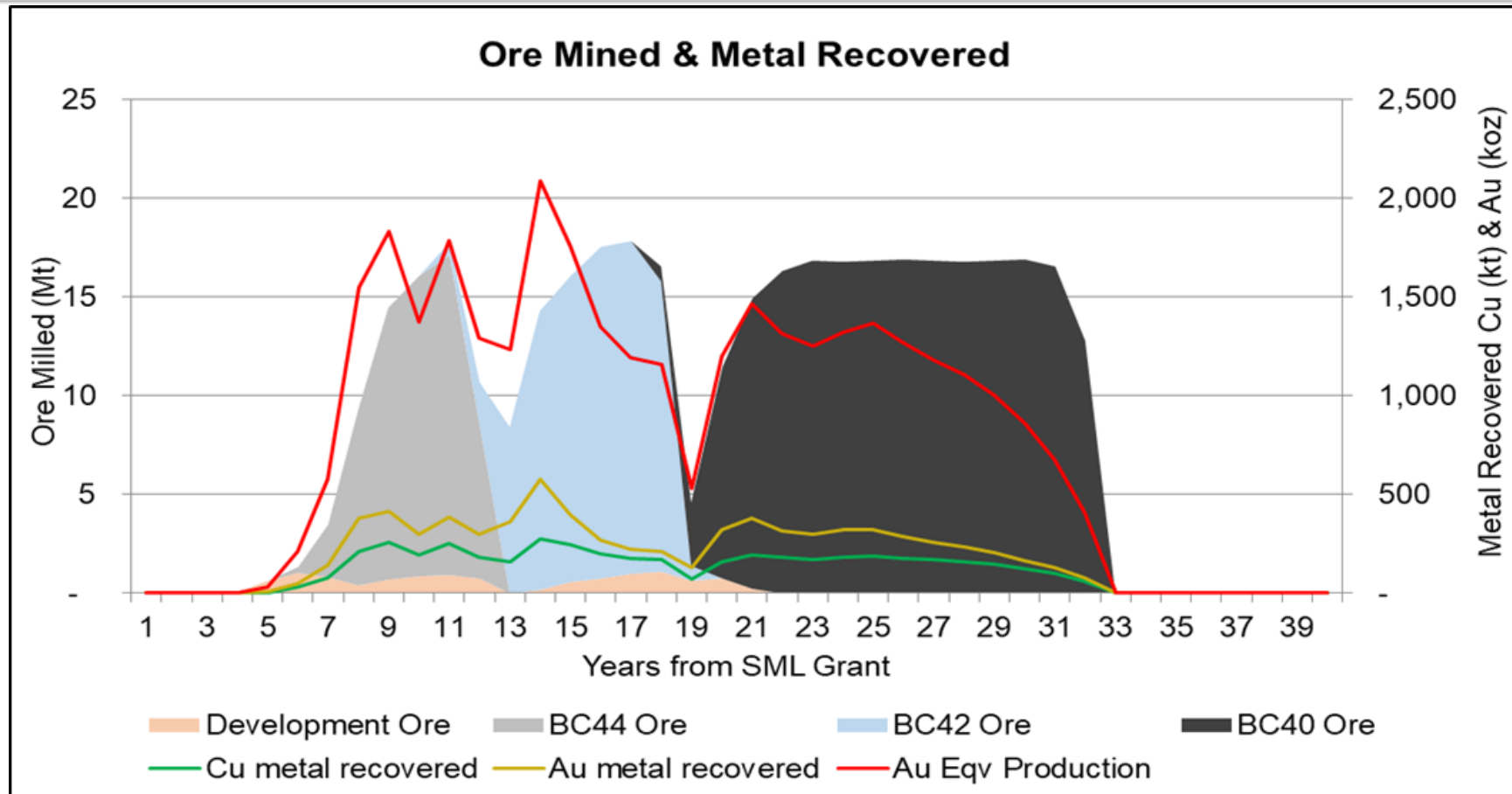
<sup>4</sup> From first production of the processing plant (excluding construction and closure phases)

<sup>5</sup> Maximum cumulative negative free cashflow comprises undiscounted free cash flow from commencement of construction

<sup>6</sup> Total operating costs include mining costs, processing costs, infrastructure costs and general and administrative costs.

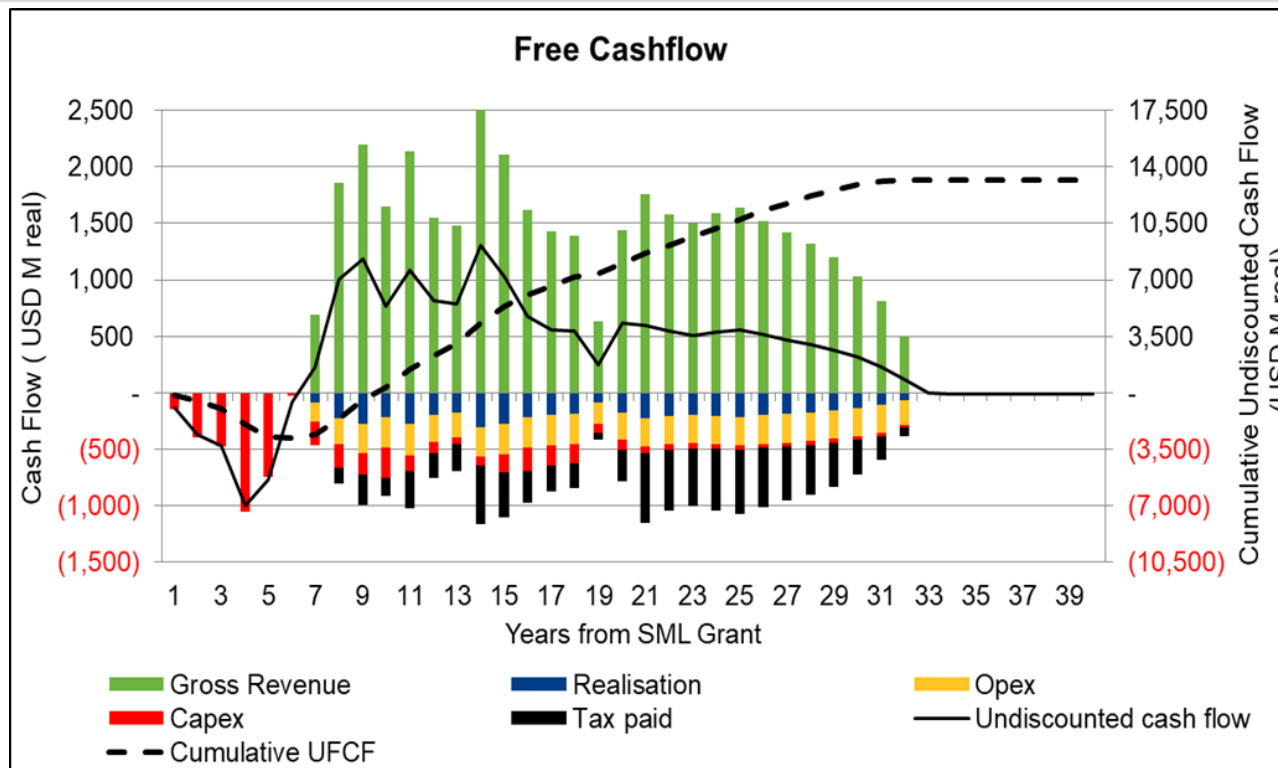
<sup>7</sup> Cash costs are total operating costs plus realisation costs, less gold by-product revenue, divided by total copper production

# Wafi-Golpu – Indicative production<sup>1,2,3</sup>



- Figures above reflect 100% of project, Newcrest owns 50% of the project. These figures are estimates from the updated Feasibility Study (as at 19 March 2018) and as such were prepared with the objective of being subject to an accuracy range of  $\pm 15\%$ , with the exception of block cave 40 (due to limited geotechnical data; further work is planned to obtain orebody data to confirm rock strength across the BC40 footprint) and associated infrastructure which was prepared with a prefeasibility accuracy range of  $\pm 25\%$ . As timing for finalisation of the SML or a suitable fiscal and stability framework and supporting arrangements is uncertain, valuation outcomes are shown at the time of commencement of earthworks for the access Nambonga decline. Costs are based on December 2017 real estimates. Neither the costs nor real cost escalation impacts prior to commencement of earthworks are included in the valuation outcomes. The figures are subject to all necessary permits, regulatory requirements and Board approval and further works. The production target utilises 98% of the full project's probable Ore Reserves contained metal. Ore Reserves and Mineral Resources based on Newcrest's 50% ownership share of Golpu. For Golpu Ore Reserves refer to market release titled "Update Wafi-Golpu Feasibility Study" dated 19 March 2018 and "Supplementary Data on Updated Wafi-Golpu Feasibility Study" dated 12 April 2018 and see slide 57 for summary. For Golpu Mineral Resources refer to market release "Wafi-Golpu – Update on Stage One Feasibility and Stage Two Prefeasibility Studies" dated 15 February 2016 and see slide 57 for summary. It is Newcrest's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold. Newcrest is predominantly a gold producer and as such gold equivalents have been reported for Golpu for ease of understanding among investors. Copper is the dominant revenue source for Golpu.
- Assumptions include: Gold price of US\$1,200/oz, copper price of US\$3.00/lb, AUD:USD exchange rate of 0.75 and USD:PGK exchange rate of 3.10 and the data set out in slide 57
- Au Eqv production (by-product basis) = Recovered Au oz+(Cu Price \$US/lbx2204.62/Au Price +US\$/oz) x Recovered copper tonnes. Based on LOM AU recovery of 68%,CU recovery of 95%

# Wafi-Golpu – Indicative free cashflow<sup>1,2</sup>



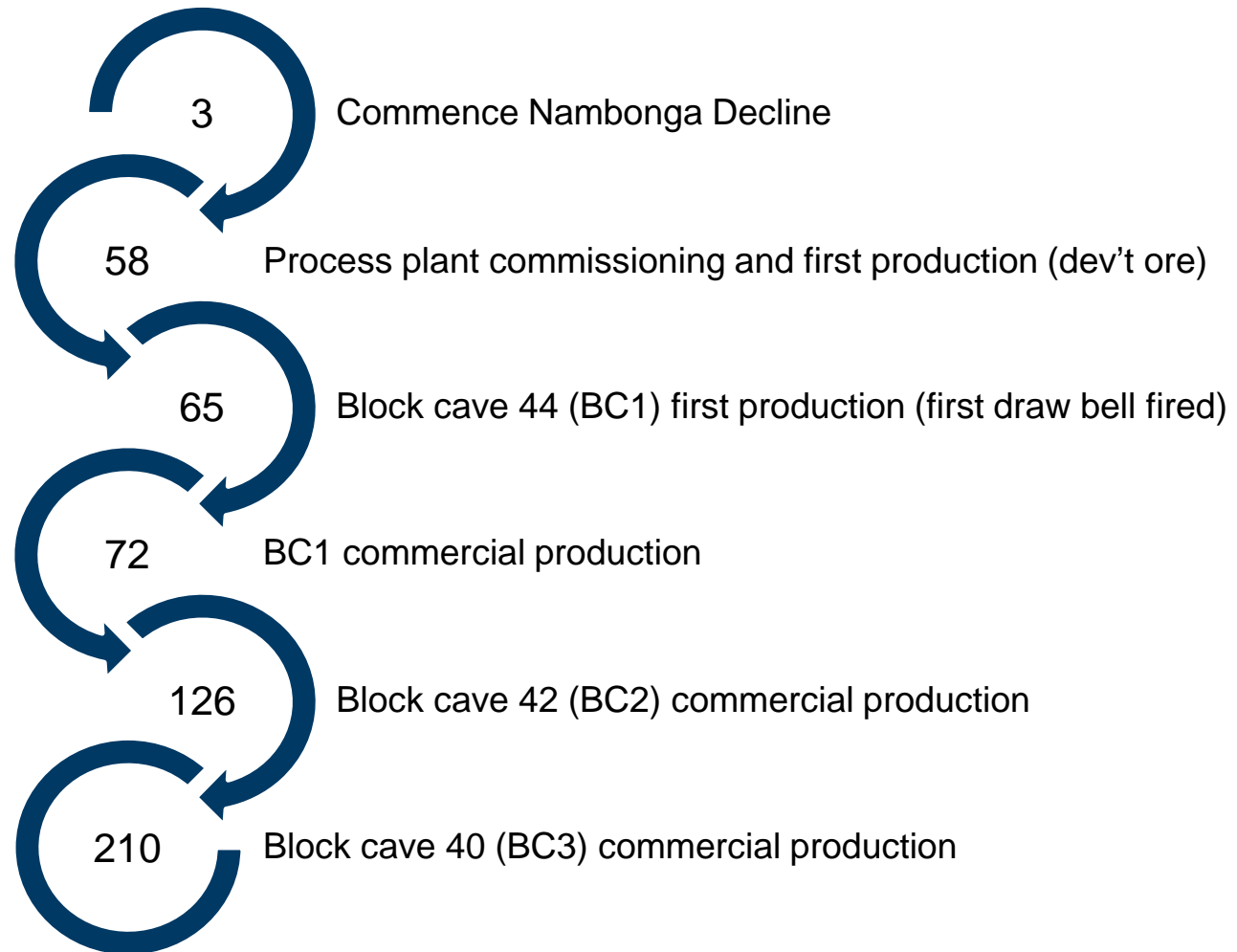
Year post grant of SML and board approval	1	2	3	4	5	6
Undiscounted FCF (100% basis)	\$(133)m	\$(374)m	\$(465)m	\$(1,003)m	\$(766)m	\$(82)m

1 Figures above reflect 100% of project, Newcrest owns 50% of the project. These figures are estimates from the updated Feasibility Study (as at 19 March 2018) and as such were prepared with the objective of being subject to an accuracy range of  $\pm 15\%$ , with the exception of block cave 40 (due to limited geotechnical data; further work is planned to obtain orebody data to confirm rock strength across the BC40 footprint) and associated infrastructure which was prepared with a prefeasibility accuracy range of  $\pm 25\%$ . As timing for finalisation of the SML or a suitable fiscal and stability framework and supporting arrangements is uncertain, valuation outcomes are shown at the time of commencement of earthworks for the access Nambonga decline. Costs are based on December 2017 real estimates. Neither the costs nor real cost escalation impacts prior to commencement of earthworks are included in the valuation outcomes. The figures are subject to all necessary permits, regulatory requirements and Board approval and further works. Refer to slide 58 for production target. The production target utilises 98% of the full project's probable Ore Reserves contained metal. Ore Reserves and Mineral Resources based on Newcrest's 50% ownership share of Golpu. For Golpu Ore Reserves refer to market release titled "Update Wafi-Golpu Feasibility Study" dated 19 March 2018 and "Supplementary Data on Updated Wafi-Golpu Feasibility Study" dated 12 April 2018 and see slide 57 for summary. For Golpu Mineral Resources refer to market release "Wafi-Golpu – Update on Stage One Feasibility and Stage Two Prefeasibility Studies" dated 15 February 2016 and see slide 57 for summary.

2 Assumptions include: Gold price of US\$1,200/oz, copper price of US\$3.00/lb, AUD:USD exchange rate of 0.75 and USD:PGK exchange rate of 3.10 and the data set out in slide 57

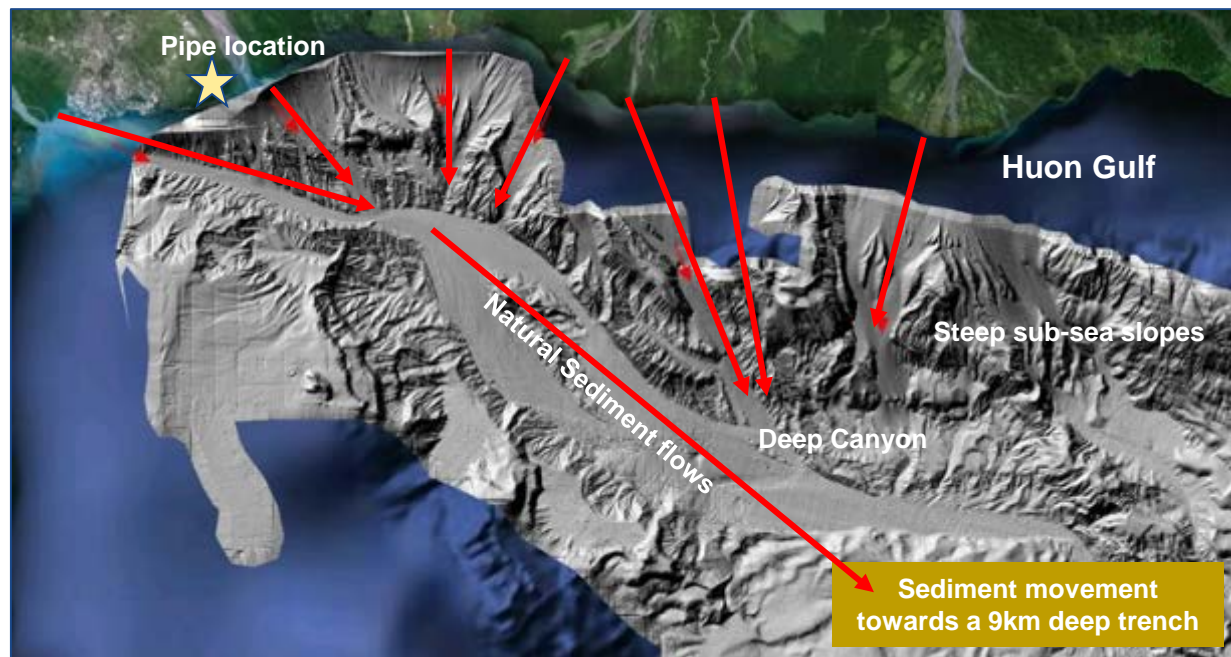
# Wafi-Golpu – Indicative timeline and staging

Months From SML  
& Board Approval<sup>1,2</sup>



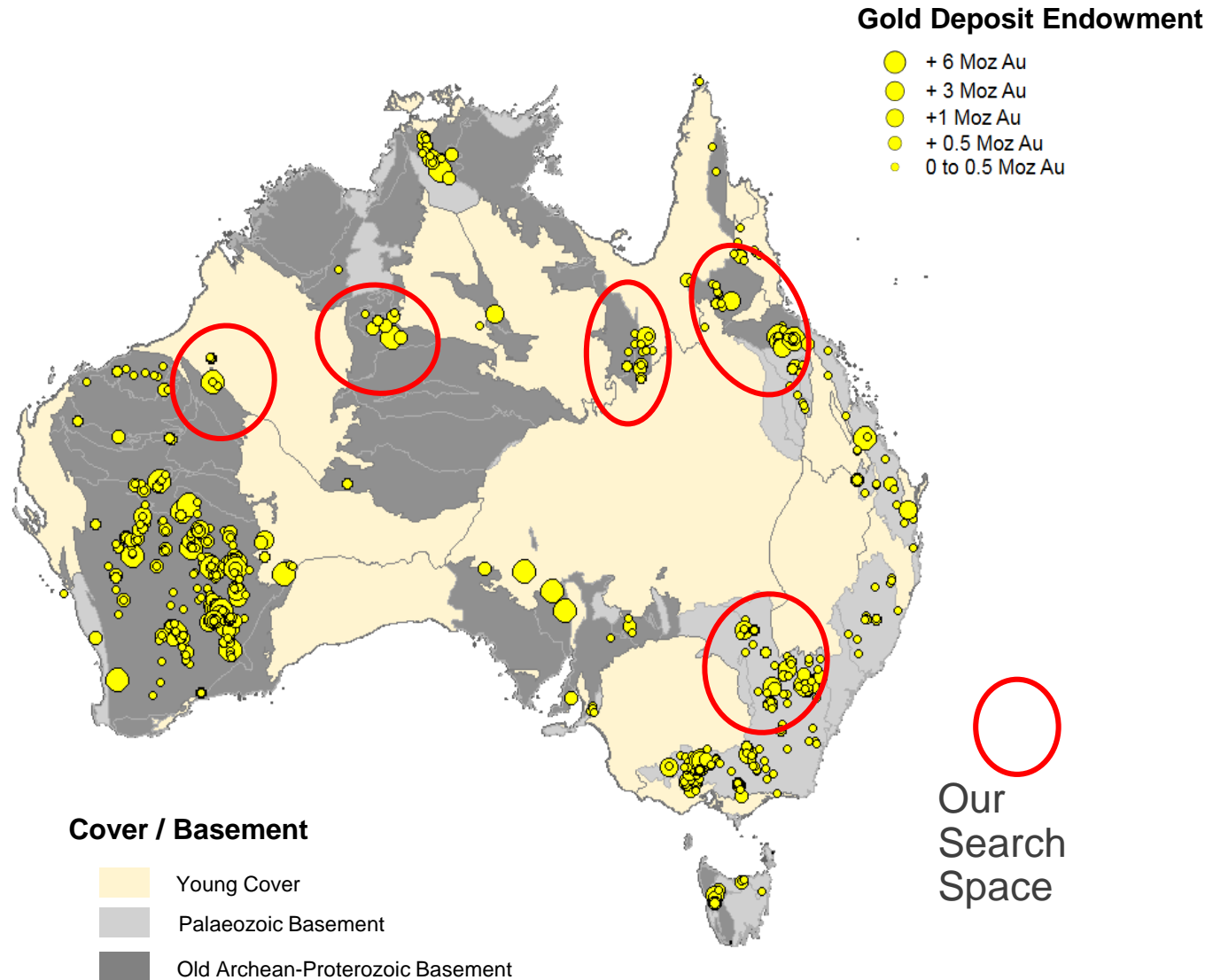
1 Progression through stages of the Project, and timing of those stages is subject to market and operating conditions and receipt of all necessary approvals, including Board approvals  
2 Recent developments in Papua New Guinea have resulted in a delay to permitting of the Wafi-Golpu Project. Newcrest is waiting to recommence discussions with the PNG Governments as to the Special Mining Lease

# DSTP the preferred tailings option



- Extensive scientific studies completed
- Western Huon Gulf is a highly suitable environment for DSTP
- Environmentally and socially, deep sea tailings placement is the safest tailings management method in this highly seismic zone
- Tailings co-deposited with substantial natural sediment load from the Markham, Busu and other rivers

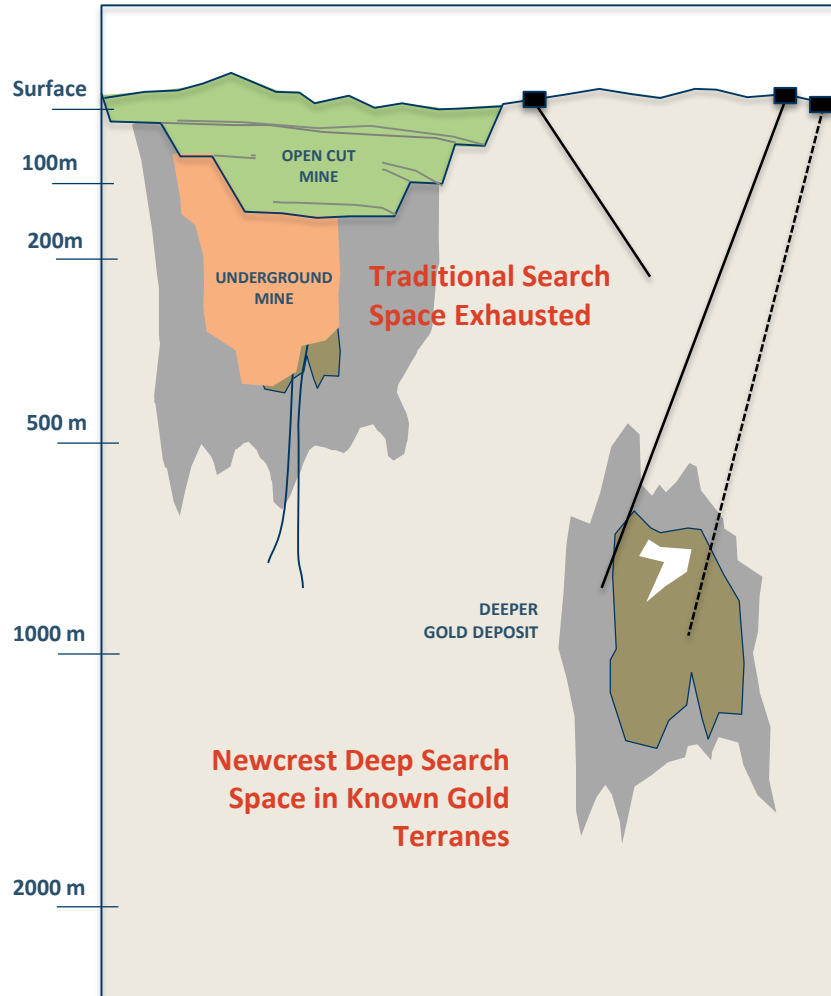
# Australia Undercover Search Space – New Approach



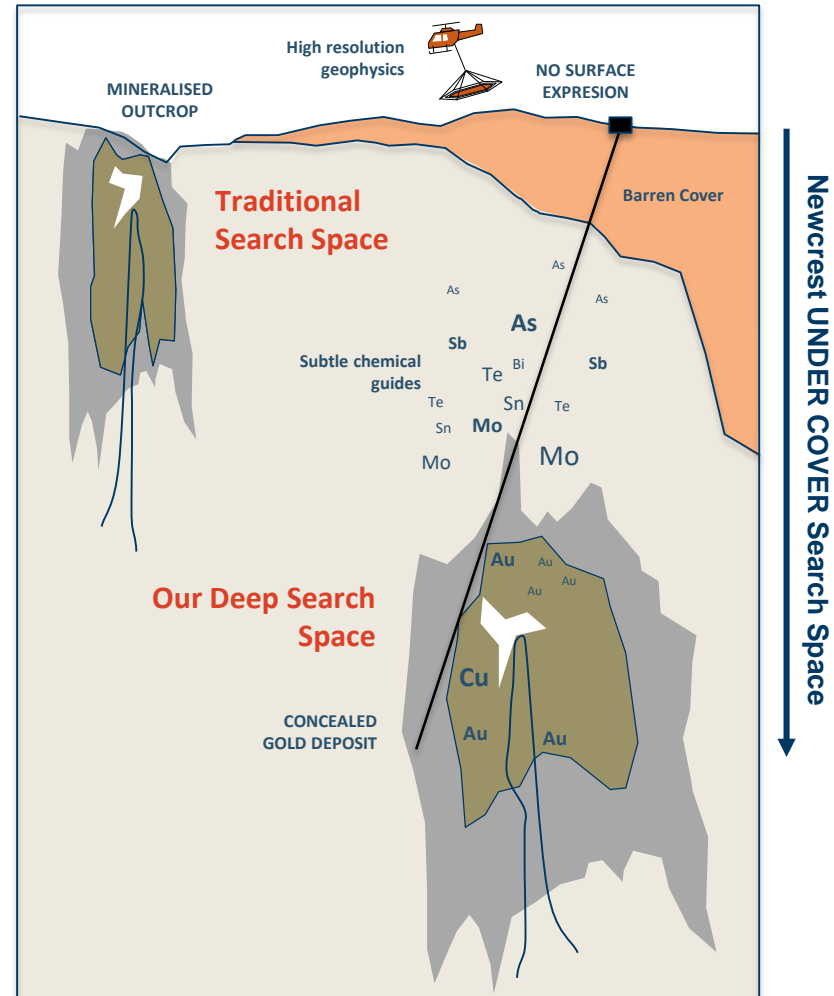
# Looking deeper in Australia opens new opportunities

## 1. Looking Deeper in Outcrop Areas

Cross Section (Not to Scale)

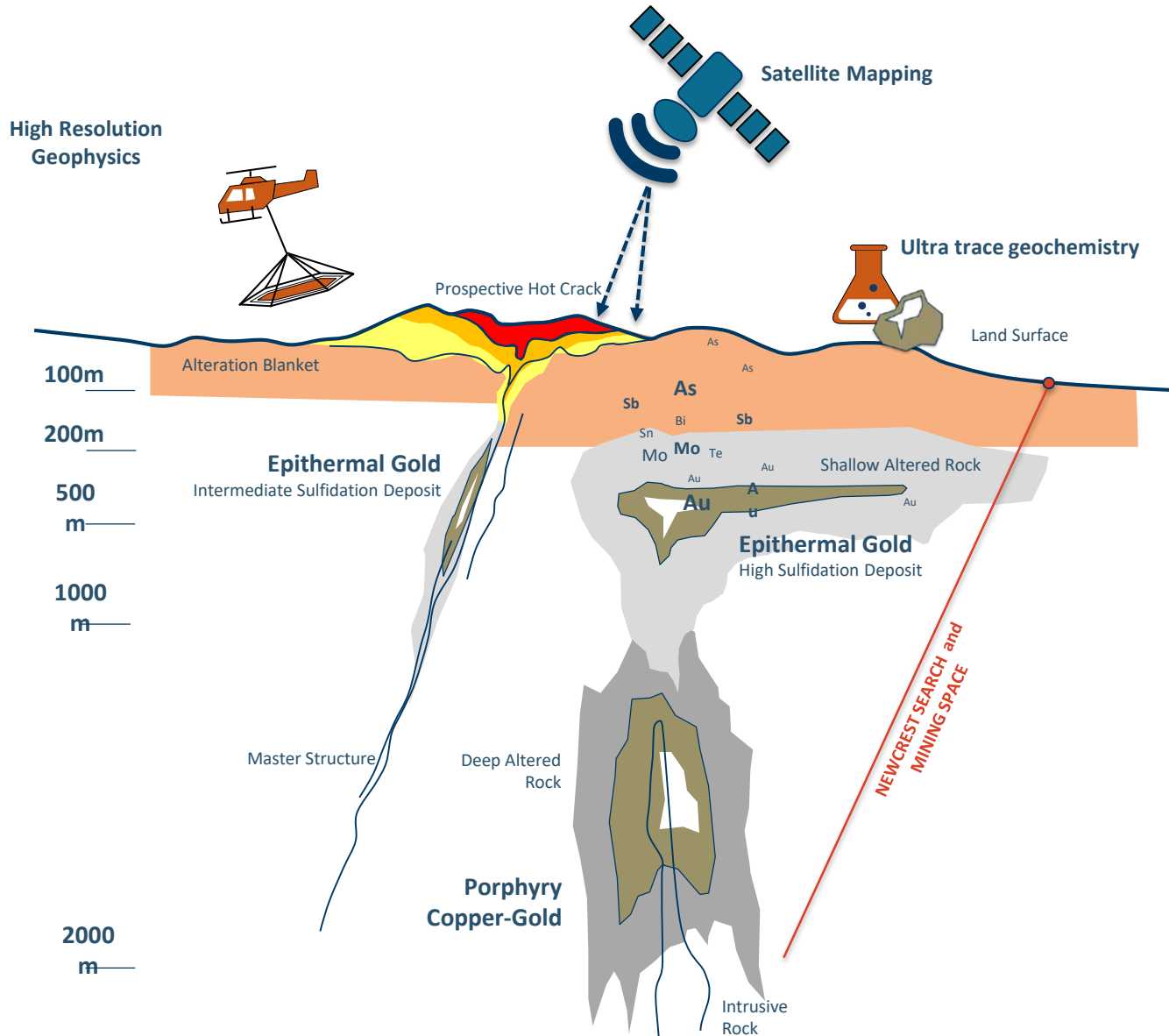


## 2. Exploring under Cover





# Leveraging of our expertise to look deeper in South America



# Exploration Innovation

## Smarter and Faster Exploration

### Ground Selection

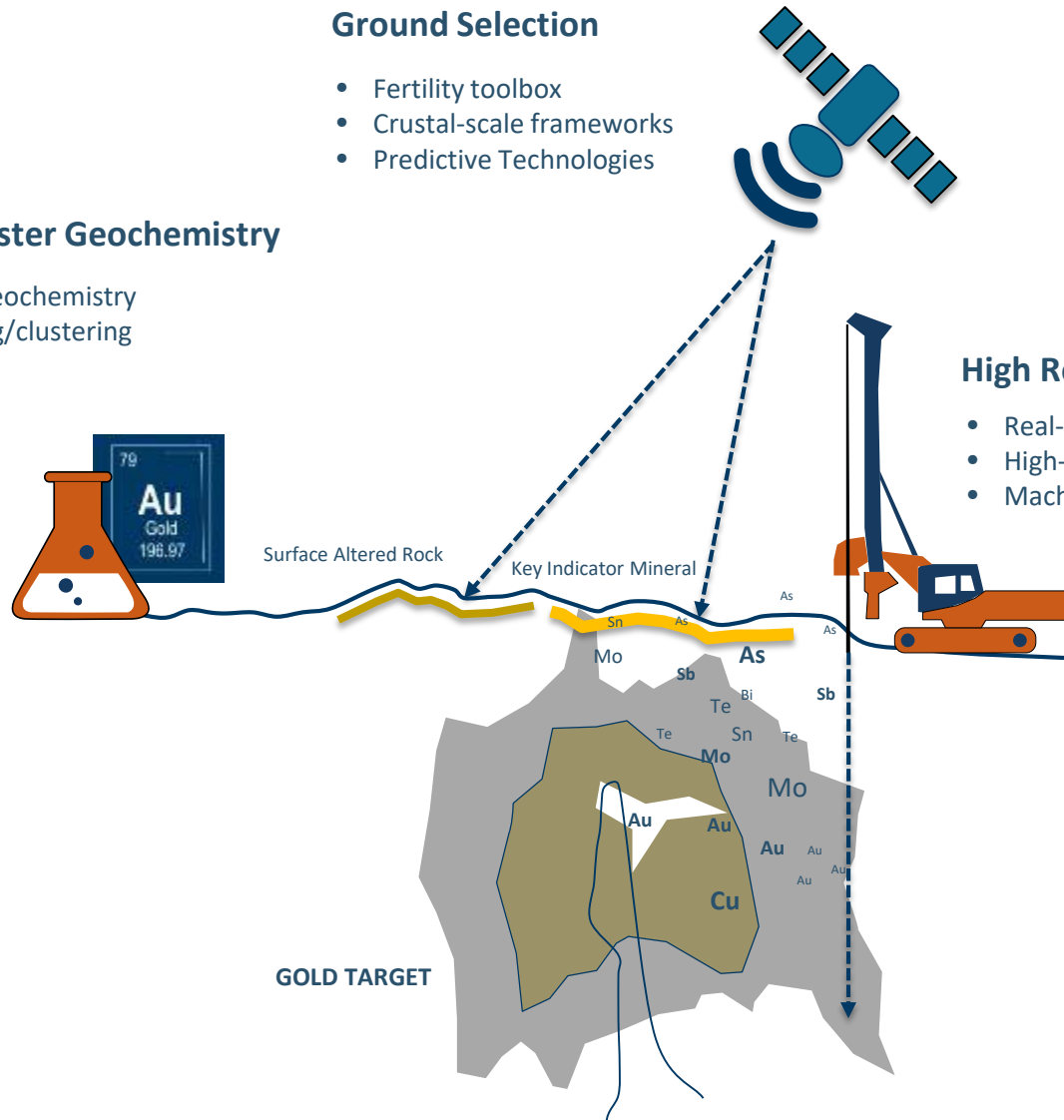
- Fertility toolbox
- Crustal-scale frameworks
- Predictive Technologies

### Smarter and Faster Geochemistry

- Ultra low level geochemistry
- Machine learning/clustering

### High Resolution Core Logging

- Real-time assaying
- High-resolution mineral mapping
- Machine learning/object detection



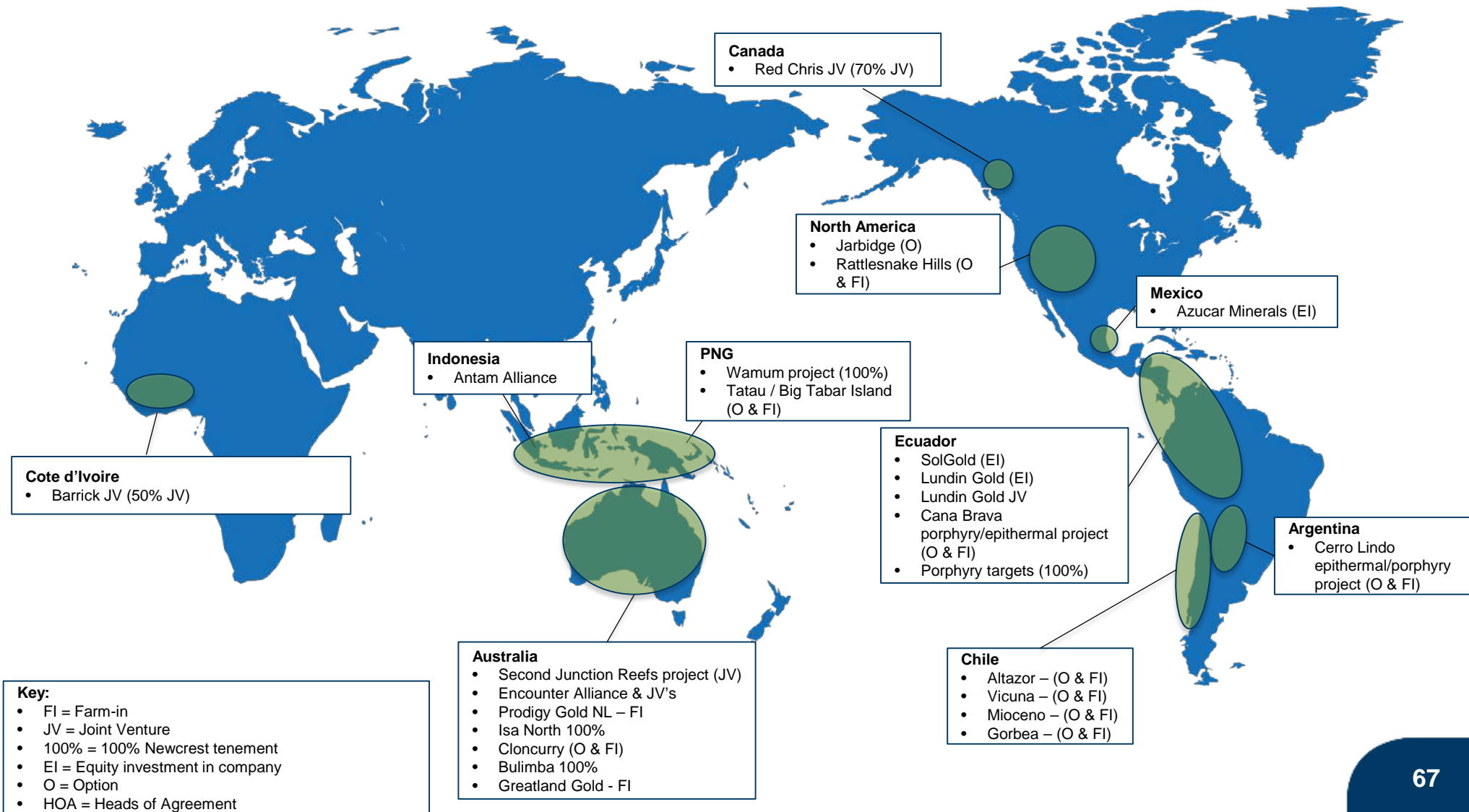
# What is a Tier 1 deposit?

*“We aspire to a portfolio within 10 years of 5 x Tier 1 assets, 2 - 4 x Tier 2 assets and a strong pre-production pipeline ...”*

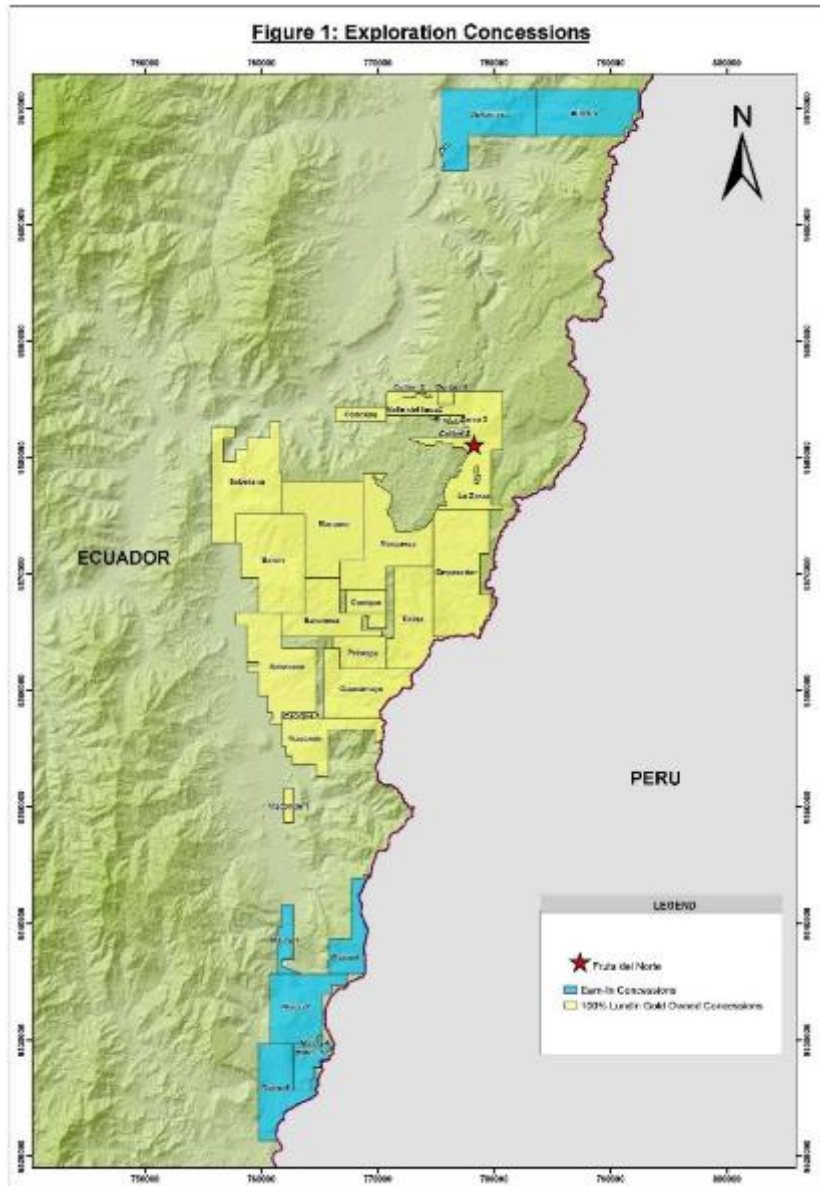
Definitions of Tier 1 and Tier 2 assets below used to guide portfolio optimisation decisions:

	Tier 1	Tier 2
Scale	Potential for > 300 kozpa Au	Potential for > 200 kozpa Au
Mine Life	Potential for > 15 year mine life preferred	Potential for > 10 year mine life preferred
Cost position (AISC/oz)	<\$800	<\$900
Value Upside	Significant resource or exploration upside likely	Moderate resource or exploration upside likely

# Current exploration footprint



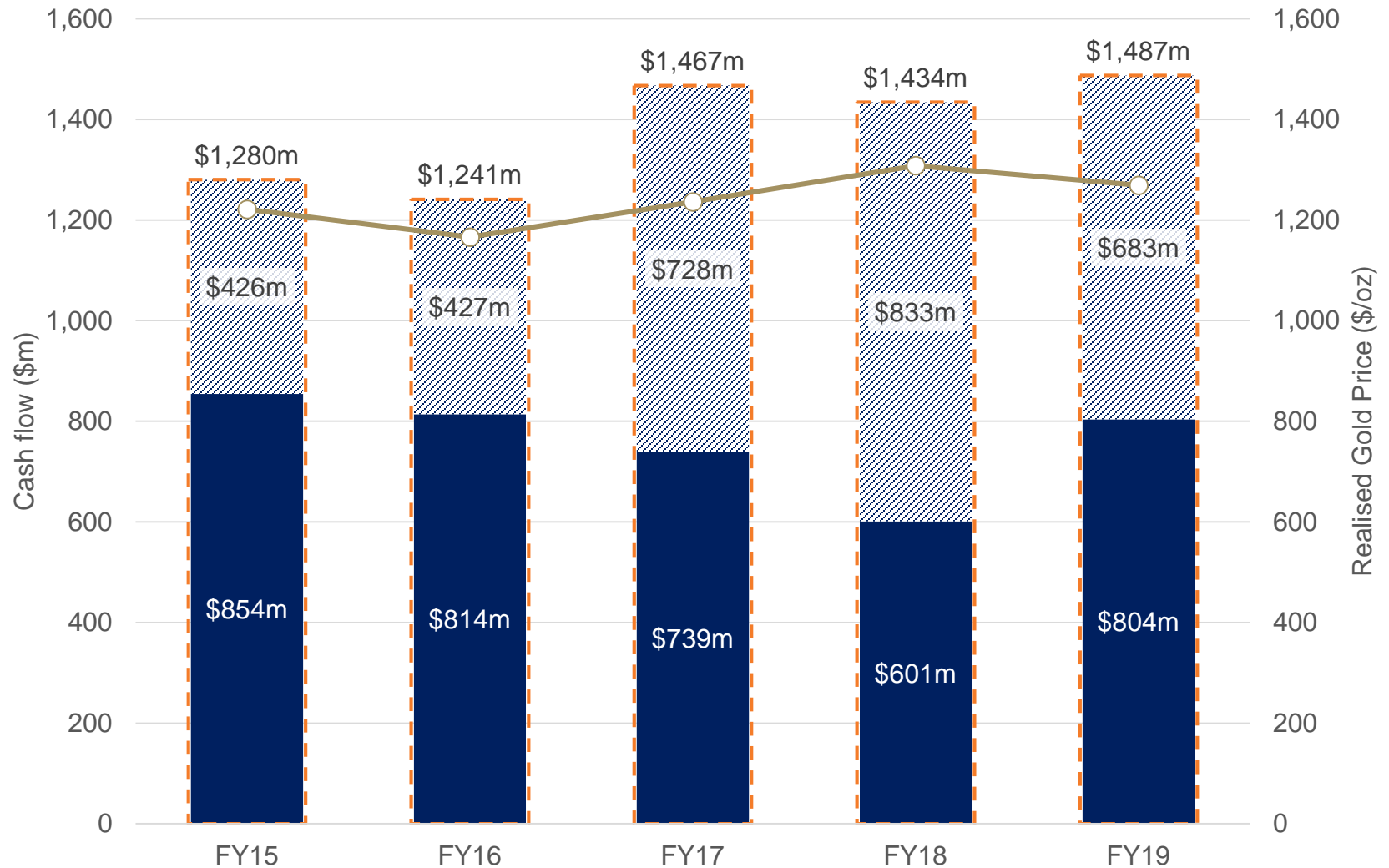
# Lundin Gold strategic partnership



## Exploration earn-in

- JV to explore eight early stage exploration concessions north and south of Fruta del Norte finalised
- Up to 50% interest earn-in → \$20m over a 5yr period, incl. minimum \$4m in first 2 yrs
- Newcrest to manage exploration activities
- Synergies to be realised through considerable combined experience of discovering epithermal gold and deep gold-copper porphyries
- Aligns with our strategy of building a high-quality exploration portfolio

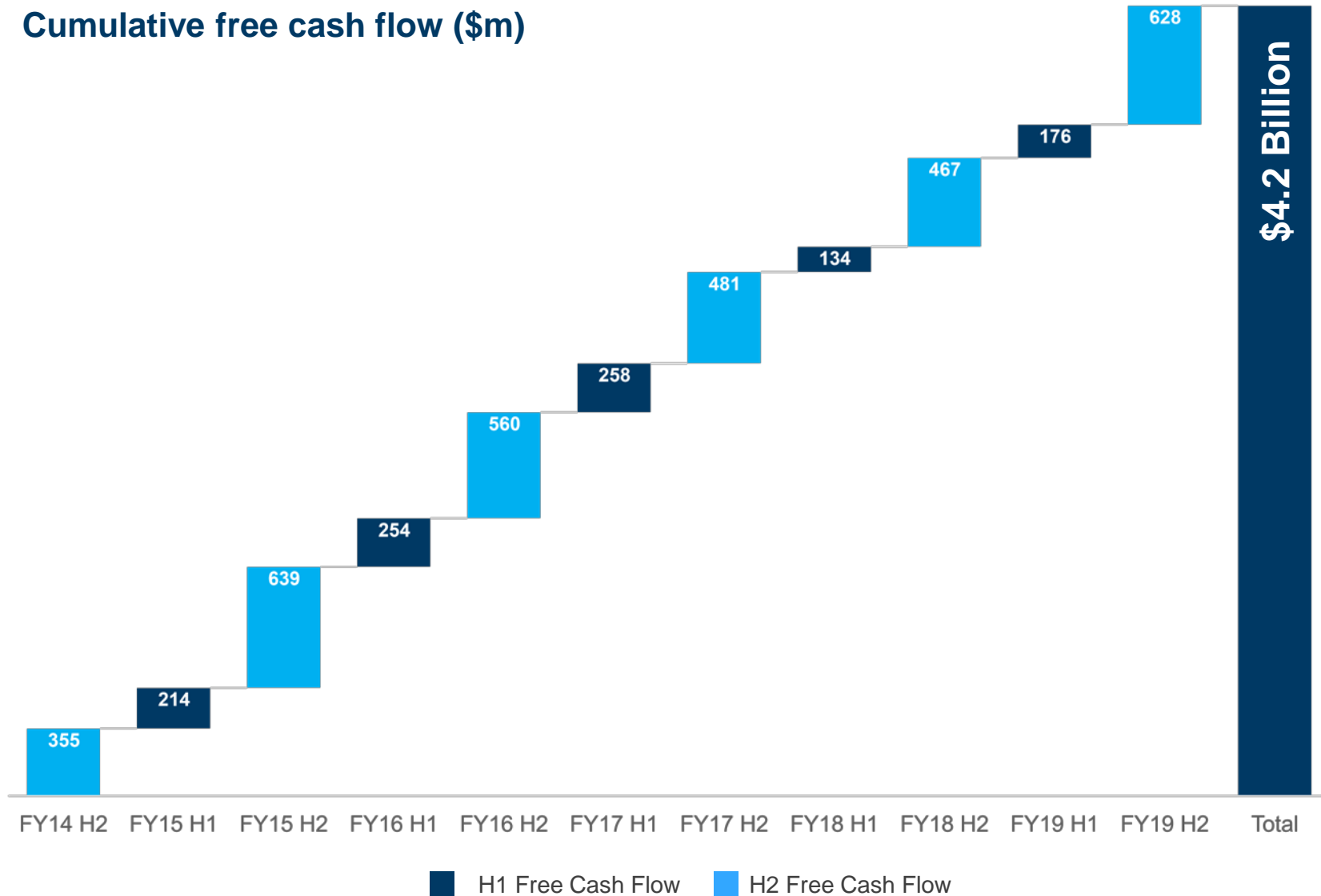
# History of strong operating, investing & free cash flow



Free cash flow (\$m)
  Investing cash flow (\$m)
  Operating cash flow (\$m)
  Realised Gold Price (\$/oz)

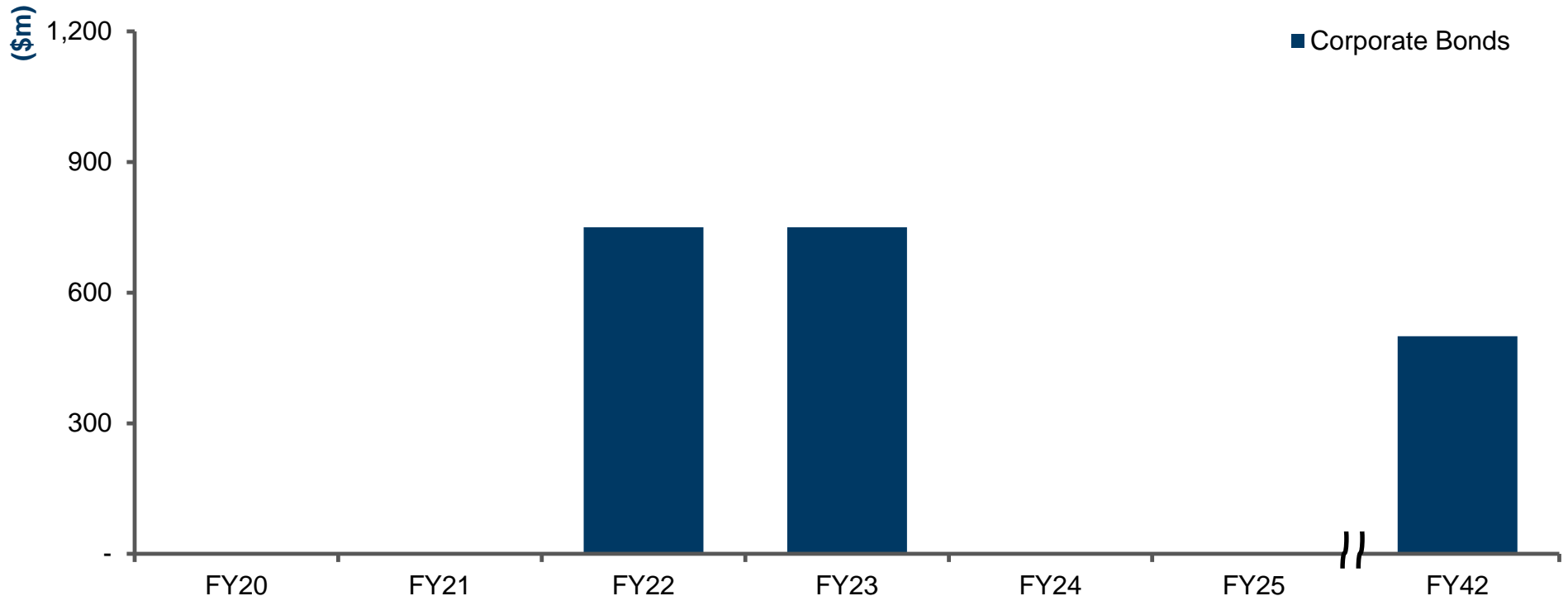
# Eleven consecutive halves of strong free cash flow

Cumulative free cash flow (\$m)



# Good debt structure and clean balance sheet

## Maturity profile as at 30 June 2019<sup>1,3</sup>



- No goodwill remaining on the balance sheet
- Relatively low level of future mine rehabilitation costs<sup>2</sup>

1 All Newcrest's debt is denominated in USD

2 Relative to other major gold peers. Provision (discounted) of \$361m at 30 June 2019, reflecting an estimate of \$372m (undiscounted)

3 Corporate bonds mature in November 2021, October 2022 and November 2041 respectively



# Improving financial policy metrics

	Element	Target	30 June 2017	30 June 2018	30 June 2019
Financial Metrics	Leverage ratio (Net Debt / EBITDA)	Less than 2.0x (for trailing 12 months)	1.1x	0.7x	0.2x
	Gearing Ratio	Less than 25%	16.6%	12.2%	4.9%
	Credit rating	Aim to maintain investment grade	Investment grade	Investment grade	Investment grade
	Coverage	Cash and committed undrawn bank facilities of at least \$1.5bn, ~1/3 in cash	\$2.5bn (\$492m cash)	\$3.0bn (\$953m cash)	\$3.6bn (\$1,600m cash)



FY19 Final dividend of US 14.5 cents per share

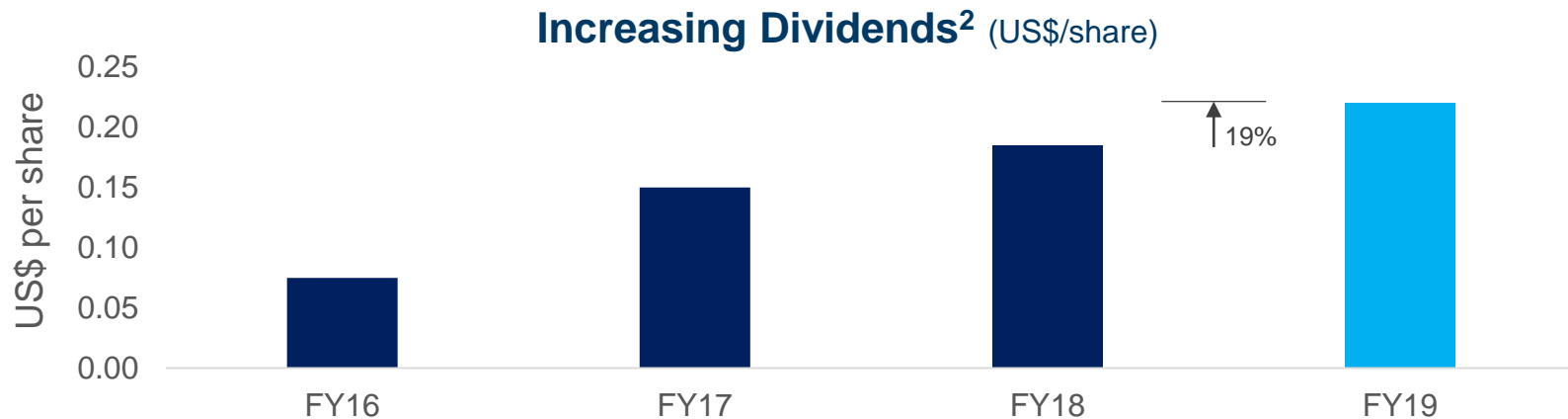
# Focused on returns to shareholders

## Dividend Policy<sup>1</sup>

Newcrest's dividend policy seeks to balance financial performance and capital commitments with a prudent leverage and gearing level for the Company.

Newcrest looks to pay ordinary dividends that are sustainable over time having regard to its financial policy, profitability, balance sheet strength and reinvestment options in the business.

Newcrest is targeting a total dividend payment of at least 10-30% of free cash flow generated for that financial year, with the dividend being no less than US15 cents per share on a full year basis.



<sup>1</sup> Declaration of any dividend remains subject to Board discretion and approval

<sup>2</sup> Dividends declared/determined in respect of each financial year

# Newcrest's long-term metal price assumptions used for Reserves and Resources estimates<sup>1</sup>

<b>Long Term Metal Price Assumptions</b>	<b>Newcrest &amp; MMJV</b>
<b>Mineral Resources Estimates</b>	
Gold Price	US\$1,300/oz
Copper Price	US\$3.40/lb <sup>2</sup>
Silver Price	US\$21.00/oz
<b>Ore Reserves Estimates</b>	
Gold Price	US\$1,200/oz
Copper Price	US\$3.00/lb <sup>3</sup>
Silver Price	US\$18.00/oz
<b>Long Term FX Rate AUD:USD</b>	<b>0.75</b>

<sup>1</sup> As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018

<sup>2</sup> US\$3.40/lb is the equivalent of US\$7,496/t

<sup>3</sup> US\$3.00/lb is the equivalent of US\$6,614/t

# Newcrest's Mineral Resources and Ore Reserves

## 31 December 2018 Gold Mineral Resources<sup>1</sup>

Dec-18 Mineral Resources  Gold Mineral Resources (inclusive of Gold Ore Reserves)	Competent Person	Measured Resource		Indicated Resource		Inferred Resource		Dec-18 Total Resource			Comparison to Dec-17 Total Resource		
		Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	In situ Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	In situ Gold (million ounces)
<b>Operational Provinces</b>													
Cadia East Underground	Vik Singh	-	-	2,900	0.36	-	-	2,900	0.36	34	3,000	0.37	35
Ridgeway Underground		-	-	110	0.57	41	0.38	150	0.52	2.4	150	0.52	2.4
Other		33	0.30	80	0.35	11	0.70	120	0.37	1.5	300	0.43	4.1
<b>Total Cadia Province</b>										<b>38</b>			<b>42</b>
Main Dome Open Pit (incl. stockpiles)	Ashok Doorgapershad	5.5	0.38	18	0.67	0.27	0.25	24	0.60	0.46	40	0.68	0.87
West Dome Open Pit		-	-	150	0.63	0.15	0.41	150	0.63	3.1	200	0.62	4.0
Telfer Underground		-	-	39	1.7	12	1.5	50	1.6	2.7	61	1.6	3.1
Other		-	-	0.44	2.9	4.4	1.1	4.9	1.3	0.20	4.9	1.3	0.20
<b>Total Telfer Province</b>										<b>6.4</b>			<b>8.2</b>
Lihir	Glenn Patterson-Kane	85	2.0	540	2.3	67	2.3	690	2.3	50	710	2.3	52
Gosowong <sup>1</sup>	Denny Lesmana	-	-	2.8	10	0.57	9.2	3.3	10	1.1	3.7	10	1.2
Seguela	Paul Kitto	-	-	-	-	-	-	-	-	-	5.8	2.3	0.43
<b>Total Operational Provinces</b>										<b>96</b>			<b>100</b>
<b>Non-Operational Provinces</b>													
MMJV - Golpu / Wafi & Nambonga (50%) <sup>2</sup>	David Finn / Greg Job	-	-	400	0.86	100	0.72	500	0.83	13	500	0.83	13
Namosi JV (71.82%) <sup>3</sup>	Vik Singh	-	-	1,300	0.11	120	0.08	1,400	0.11	4.9	1,600	0.11	5.4
<b>Total Non-Operational Provinces</b>										<b>18</b>			<b>19</b>
<b>Total Gold Mineral Resources</b>										<b>110</b>			<b>120</b>

NOTE: Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals

<sup>1</sup> Gosowong (inclusive of Toguraci and Kencana) is owned and operated by PT Nusa Halmahera Minerals, an incorporated joint venture company (Newcrest 75%). The figures shown represent 100% of the Mineral Resource.

<sup>2</sup> MMJV refers to projects owned by the Morobe Mining unincorporated joint ventures between subsidiaries of Newcrest (50%) and Harmony Gold Mining Company Limited (50%). The figures shown represent 50% of the Mineral Resource.

<sup>3</sup> Namosi refers to the Namosi unincorporated joint venture, in which Newcrest has a 71.82% interest. The figures shown represent 71.82% of the Mineral Resource at December 2018 compared to 71.42% of the Mineral Resource at December 2017.

# Newcrest's Mineral Resources and Ore Reserves

## 31 December 2018 Copper Mineral Resources<sup>1</sup>

Dec-18 Mineral Resources  Copper Mineral Resources (inclusive of Copper Ore Reserves)	Competent Person	Measured Resource		Indicated Resource		Inferred Resource		Dec-18 Total Resource			Comparison to Dec-17 Total Resource				
		Dry Tonnes (million)	Copper Grade (% Cu)	Dry Tonnes (million)	Copper Grade (% Cu)	Dry Tonnes (million)	Copper Grade (% Cu)	Dry Tonnes (million)	Copper Grade (% Cu)	In situ Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	In situ Copper (million tonnes)		
<b>Operational Provinces</b>															
Cadia East Underground	Vik Singh	-	-	2,900	0.26	-	-	2,900	0.26	7.6	3,000	0.26	7.7		
Ridgeway Underground		-	-	110	0.30	41	0.40	150	0.33	0.48	150	0.33	0.48		
Other		33	0.13	80	0.19	11	0.52	120	0.20	0.25	300	0.16	0.48		
<b>Total Cadia Province</b>										<b>8.3</b>			<b>8.7</b>		
Main Dome Open Pit (incl. stockpiles)	Ashok Doorgapershad	5.5	0.094	18	0.093	0.27	0.013	24	0.092	0.022	33	0.077	0.026		
West Dome Open Pit		-	-	150	0.062	0.15	0.026	150	0.062	0.095	200	0.058	0.12		
Telfer Underground		-	-	39	0.39	12	0.42	50	0.40	0.20	61	0.40	0.24		
Other		-	-	-	-	14	0.37	14	0.37	0.052	14	0.37	0.052		
O'Callaghans		-	-	69	0.29	9.0	0.24	78	0.29	0.22	78	0.29	0.22		
<b>Total Telfer Province</b>										<b>0.59</b>			<b>0.66</b>		
<b>Total Operational Provinces</b>										<b>8.9</b>			<b>9.3</b>		
<b>Non-Operational Provinces</b>															
MMJV - Golpu / Wafi & Nambonga (50%) <sup>4</sup>	David Finn / Greg Job	-	-	340	1.1	92	0.68	440	1.0	4.4	430	1.0	4.4		
Namosi JV (71.82%) <sup>5</sup>	Vik Singh	-	-	1,300	0.35	330	0.37	1,600	0.35	5.7	1,600	0.35	5.4		
<b>Total Non-Operational Provinces</b>										<b>10</b>			<b>10</b>		
<b>Total Copper Mineral Resources</b>										<b>19</b>			<b>19</b>		

NOTE: Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals

<sup>4</sup> MMJV refers to projects owned by the Morobe Mining unincorporated joint ventures between subsidiaries of Newcrest (50%) and Harmony Gold Mining Company Limited (50%). The figures shown represent 50% of the Mineral Resource.

<sup>5</sup> Namosi refers to the Namosi unincorporated joint venture, in which Newcrest has a 71.82% interest. The figures shown represent 71.82% of the Mineral Resource at December 2018 compared to 71.42% of the Mineral Resource at December 2017.

<sup>1</sup> As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018.

# Newcrest's Mineral Resources and Ore Reserves

## 31 December 2018 Gold Ore Reserves<sup>1</sup>

Dec-18 Ore Reserves	Competent Person	Proved Reserve		Probable Reserve		Dec-18 Total Reserve			Comparison to Dec-17 Total Reserve		
		Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)	Dry Tonnes (million)	Gold Grade (g/t Au)	Insitu Gold (million ounces)
<b>Operational Provinces</b>											
Cadia East Underground	Geoffrey Newcombe	-	-	1,400	0.47	1,400	0.47	21	1,400	0.48	22
Ridgeway Underground		-	-	80	0.54	80	0.54	1.4	80	0.54	1.4
Other		-	-	-	-	-	-	-	86	0.53	1.5
<b>Total Cadia Province</b>								<b>22</b>			<b>25</b>
Main Dome Open Pit (incl. stockpiles)	Otto Richter	5.5	0.38	3.7	0.72	9.3	0.52	0.15	21	0.56	0.38
West Dome Open Pit		-	-	63	0.75	63	0.75	1.5	65	0.76	1.6
Telfer Underground		-	-	4.9	1.9	4.9	1.9	0.30	8.0	1.7	0.43
<b>Total Telfer Province</b>								<b>2.0</b>			<b>2.4</b>
Lihir	Steven Butt	85	2.0	240	2.4	330	2.3	24	340	2.3	25
Gosowong <sup>8</sup>	Jimmy Suroto	-	-	1.4	8.1	1.4	8.1	0.37	1.9	8.0	0.48
<b>Total Operational Provinces</b>								<b>49</b>			<b>53</b>
<b>Non-Operational Provinces</b>											
MMJV - Golpu (50%) <sup>9</sup>	Pasqualino Manca	-	-	200	0.86	200	0.86	5.5	190	0.91	5.5
Namosi JV (71.82%) <sup>10</sup>	Geoffrey Newcombe	-	-	-	-	-	-	-	950	0.12	3.7
<b>Total Non-Operational Provinces</b>								<b>5.5</b>			<b>9.2</b>
<b>Total Gold Ore Reserves</b>								<b>54</b>			<b>62</b>

Note: Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.

<sup>8</sup> Gosowong (inclusive of Toguraci and Kencana) is owned and operated by PT Nusa Halmahera Minerals, an incorporated joint venture company (Newcrest 75%). The figures shown represent 100% of the Ore Reserve.

<sup>9</sup> MMJV refers to projects owned by the Morobe Mining unincorporated joint ventures between subsidiaries of Newcrest (50%) and Harmony Gold Mining Company Limited (50%). The figures shown represent 50% of the Ore Reserve.

<sup>10</sup> Namosi refers to the Namosi unincorporated joint venture, in which Newcrest has a 71.82% interest. The figures shown represent 71.82% of the Ore Reserve at December 2018 compared to 71.42% of the Ore Reserve at December 2017.

<sup>1</sup> As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018.

# Newcrest's Mineral Resources and Ore Reserves

## 31 December 2018 Copper Ore Reserves<sup>1</sup>

Dec-18 Ore Reserves	Competent Person	Proved Reserve		Probable Reserve		Dec-18 Total Reserve			Comparison to Dec-17 Total Reserve		
		Dry Tonnes (million)	Copper Grade (% Cu)	Dry Tonnes (million)	Copper Grade (% Cu)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)	Dry Tonnes (million)	Copper Grade (% Cu)	Insitu Copper (million tonnes)
<b>Operational Provinces</b>											
Cadia East Underground	Geoffrey Newcombe	-	-	1,400	0.30	1,400	0.30	4.1	1,400	0.28	4.0
Ridgeway Underground		-	-	80	0.28	80	0.28	0.23	80	0.28	0.23
Other		-	-	-	-	-	-	-	-	86	0.15
<b>Total Cadia Province</b>								<b>4.3</b>			<b>4.3</b>
Main Dome Open Pit (incl. stockpiles)	Otto Richter	5.5	0.094	3.7	0.080	9.3	0.088	0.0082	15	0.090	0.013
West Dome Open Pit		-	-	63	0.076	63	0.076	0.048	65	0.074	0.048
Telfer Underground		-	-	4.9	0.29	4.9	0.29	0.014	8.0	0.28	0.023
O'Callaghans		-	-	44	0.29	44	0.29	0.13	44	0.29	0.13
<b>Total Telfer Province</b>								<b>0.20</b>			<b>0.21</b>
<b>Total Operational Provinces</b>								<b>4.5</b>			<b>4.5</b>
<b>Non-Operational Provinces</b>											
MMJV - Golpu (50%) <sup>11</sup>	Pasqualino Manca	-	-	200	1.2	200	1.2	2.5	190	1.3	2.4
Namosi JV (71.82%) <sup>12</sup>	Geoffrey Newcombe	-	-	-	-	-	-	-	950	0.37	3.6
<b>Total Non-Operational Provinces</b>								<b>2.5</b>			<b>5.9</b>
<b>Total Copper Ore Reserves</b>								<b>7.0</b>			<b>10</b>

Note: Data are reported to two significant figures to reflect appropriate precision in the estimate and this may cause some apparent discrepancies in totals.

<sup>11</sup> MMJV refers to projects owned by the Morobe Mining unincorporated joint ventures between subsidiaries of Newcrest (50%) and Harmony Gold Mining Company Limited (50%). The figures shown represent 50% of the Ore Reserve.

<sup>12</sup> Namosi refers to the Namosi unincorporated joint venture, in which Newcrest has a 71.82% interest. The figures shown represent 71.82% of the Ore Reserve at December 2018 compared to 71.42% of the Ore Reserve at December 2017.

<sup>1</sup> As per Newcrest Annual Statement of Mineral Resources and Ore Reserves as at 31 December 2018.

## Operating costs – exchange rate exposure estimates

Newcrest is a US dollar reporting entity, its operating costs will vary in accordance with the movements in its operating currencies where those costs are not denominated in US dollars. The table below shows indicative currency exposures on operating costs for FY19 by site:

	USD	AUD	PGK	IDR	Total
Cadia	15%	85%	-	-	100%
Telfer	15%	85%	-	-	100%
Lihir	35%	30%	35%	-	100%
Gosowong	15%	5%	-	80%	100%
<b>Group</b>	<b>20%</b>	<b>55%</b>	<b>15%</b>	<b>10%</b>	<b>100%</b>



# Operating costs – indicative costs by type

The below represents an indicative exposure on operating costs<sup>1</sup> by a variety of spend types (FY19)

	Labour <sup>2</sup>	Consumables	Maintenance (excl labour) and Parts	Energy and Fuel	Other <sup>3</sup>	Total
Cadia	35%	15%	10%	25%	15%	100%
Telfer	30%	10%	15%	15%	30%	100%
Lihir	40%	15%	20%	15%	10%	100%
Gosowong	30%	20%	10%	20%	20%	100%
<b>Group</b>	<b>35%</b>	<b>15%</b>	<b>15%</b>	<b>15%</b>	<b>20%</b>	<b>100%</b>

1 Operating costs excludes realisation costs including royalties, concentrate freight and TC/RCs

2 Labour data includes salaries, on costs, contractor costs, consultant costs, training and incentive payments (in some instances it is not possible to isolate contractor labour costs from other costs)

3 Other includes a range of costs, including equipment hire, community and environment, inward freight and insurance

# Foreign exchange sensitivities<sup>1</sup> and oil hedges

Site	Parameter	Movement	Approximate Full Year EBIT Impact (US\$m)
Cadia	AUD/USD	+0.01 AUD (0.72 → 0.73)	(8)
Telfer	AUD/USD	+0.01 AUD (0.72 → 0.73)	(4)
Lihir	USD/PGK	-0.1 PGK (3.20 → 3.10)	(7)
Gosowong	USD/IDR	-1,000 IDR (14,500 → 13,500)	(10)
Group	AUD/USD	+0.01 AUD (0.72 → 0.73)	(15)

Site <sup>2</sup>	Fuel	July 2019 – June 2020 Hedge volume/rate	Unit
Cadia	Gasoil	-	'000 bbl
Lihir	Gasoil	189	'000 bbl
Telfer	Gasoil	224	'000 bbl
Gosowong	Gasoil	116	'000 bbl
<b>Total</b>	<b>Gasoil</b>	<b>531</b>	<b>'000 bbl</b>
<b>Average hedge rate</b>		<b>79</b>	<b>\$/bbl</b>
Lihir	HSFO	135	'000 Metric tonne
<b>Average hedge rate</b>		<b>365</b>	<b>\$/Metric tonne</b>

1 Each sensitivity is calculated on a standalone basis and formulated on the basis of assumptions which, amongst other things, include the level of costs incurred, the currency in which those costs are incurred and production levels. Information provided on current information and is subject to market and operating conditions

2 Rates rounded to nearest \$1 (rate) and volume to the nearest thousand (bbl, Mt). Totals may not match sum due to rounding. At the time the hedges were placed, they represent approximately 60% of power generation usage at Lihir and Gosowong, approximately 70% of non-power usage at Lihir to June 2020, and approximately 70% of non-power usage at Telfer to June 2020

# AISC and AIC to cost of sales reconciliation

	12 months to 30 June 2019		12 months to 30 June 2018	
	\$m	\$/oz	\$m	\$/oz
<b>Gold sales (koz)</b>	<b>2,529</b>		<b>2,308</b>	
<b>Cost of Sales<sup>1</sup></b>	<b>2,648</b>	<b>1,047</b>	<b>2,724</b>	<b>1,180</b>
less Depreciation and amortisation	(727)	(288)	(777)	(336)
less By-product revenue <sup>1</sup>	(569)	(225)	(543)	(235)
plus Gold concentrate treatment and refining deductions <sup>1</sup>	35	14		
plus Corporate costs	90	36	90	39
plus Sustaining exploration	14	5	10	5
plus Production stripping and underground mine development	115	46	150	65
plus Sustaining capital expenditure	248	98	250	108
plus Rehabilitation accretion and amortisation	11	5	22	9
<b>All-In Sustaining Costs</b>	<b>1,865</b>	<b>738</b>	<b>1,926</b>	<b>835</b>
plus Non-sustaining capital expenditure <sup>2</sup>	153	60	141	61
plus Growth and development expenditure	11	4	-	-
plus Non-sustaining exploration	64	26	62	27
<b>All-In Cost</b>	<b>2,093</b>	<b>828</b>	<b>2,129</b>	<b>923</b>

1. During the current period Newcrest adopted AASB 15 Revenue from Contracts with Customers and elected to apply the modified retrospective method of adoption. Under this method, comparative figures are not required to be restated and continue to be presented under the previous standard AASB 118 Revenue. Accordingly, prior period treatment and refining costs of \$132 million (\$92 million related to Cadia and \$40 million related to Telfer) associated with the sale of concentrate are presented in cost of sales and not as a reduction in revenue.
2. Represents spend on major projects that are designed to increase the net present value of the mine are not related to current production. Significant projects in the current period include key expansion projects at Cadia (including PC2-3 feasibility study, mill expansion and recovery studies), projects to facilitate mining of the Kapit ore-body, throughput and recovery related projects at Lihir and Wafi-Golpu project capital.

# FY19 results summary

Element	Cadia	Lihir	Telfer	Goso-wong	Wafi-Golpu	Corp / Other	Group
Gold Production (koz)	913	933	452	190	-	-	2,488
Copper Production (kt)	91	-	15	-	-	-	106
AISC (\$m)	121	855	565	219	-	105	1,865
Capital Expenditure							
- Production Stripping <sup>1</sup>	-	63	67	-	-	-	130
- Sustaining Capital <sup>1</sup>	95	76	39	22	-	16	248
- Major Capital	81	42	2	-	28	-	153
<b>Total Capital</b>	<b>176</b>	<b>181</b>	<b>108</b>	<b>22</b>	<b>28</b>	<b>16</b>	<b>531</b>
Exploration <sup>2</sup>							78
Depreciation							727

<sup>1</sup> Production stripping and sustaining capital shown above are included in All-In Sustaining Cost

<sup>2</sup> Exploration is not included in Total Capital

# FY20 guidance<sup>1,5</sup>

Element	Cadia	Lihir	Telfer	Goso-wong	Wafi-Golpu	Corp / Other	Group
Gold production (koz)	760-840	930-1,030	400-460	145-175	-	-	2,350-2,500
Copper production (kt)	~100	-	~15	-	-	-	110-120
AISC (\$m) <sup>2</sup>	40-130	890-970	485-545	190-215	-	105-120	1,780-1,880
Capital expenditure							
- Production stripping <sup>2</sup>	-	100-120	30-40	-	-	-	140-150
- Sustaining capital <sup>2</sup>	95-105	70-90	30-40	20-25	-	20-25	240-280
- Major projects <sup>3</sup>	180-240	80-100	~5	-	~15	-	300-350
Total Capital expenditure	275-345	250-310	65-85	20-25	~15	20-25	680-780
Exploration <sup>4</sup>							90-100
Depreciation							655-705

1 Achievement of guidance is subject to operating and market conditions. The guidance stated assumes weighted average copper price of \$2.70 per pound (\$5,952/t) and AUD:USD exchange rate of 0.72 for FY20.

2 Production stripping and sustaining capital shown above are included in All-In Sustaining Cost

3 Major projects (non-sustaining) includes costs for the Cadia Expansion which is yet to be approved by the Board

4 Exploration is not included in Total Capital expenditure and includes \$14m (70% Newcrest share) related to Red Chris exploration activity

5 Guidance numbers do not include Red Chris operations due to the transaction completing on 15 August 2019. An update of guidance, inclusive of Red Chris operations, will be provided in the September 2019 Quarterly Report.

# IT & Digital Awards



“Fix This” mobile maintenance app using AI Machine Vision technology; Warehouse Barcoding mobility solution for Cadia; “My Telfer” site mobility App; Easy SAP App for employee and manager self-service utilising SAP Cloud platform.



Improving availability and production using virtual sensors to run in parallel to real sensors. The virtual sensors can predict level of a crushed ore bin when real sensors are off line.



Newcrest’s Crowdsourcing Platform recognised for achieving step-change in mining innovation and collaboration.



Australian Service Excellence Awards

Top 5 Finalist for our excellence in customer service  
*(winners to be announced in October 2019)*



Shortlisted for our work in Digital innovation

# Winning Internet of Things (IoT) solutions

*Improving availability and production with Industrial IoT*

## PROBLEM

- Cadia: Microwave Sensors in underground crushers monitor level of material in bins and are regularly damaged resulting in unplanned downtime

## SOLUTION

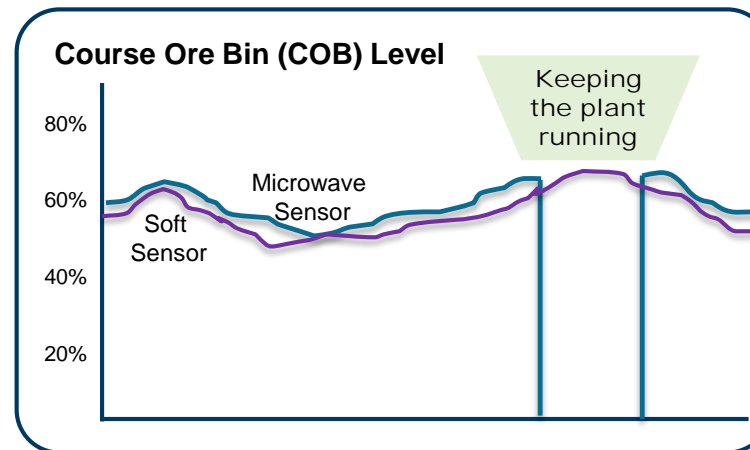
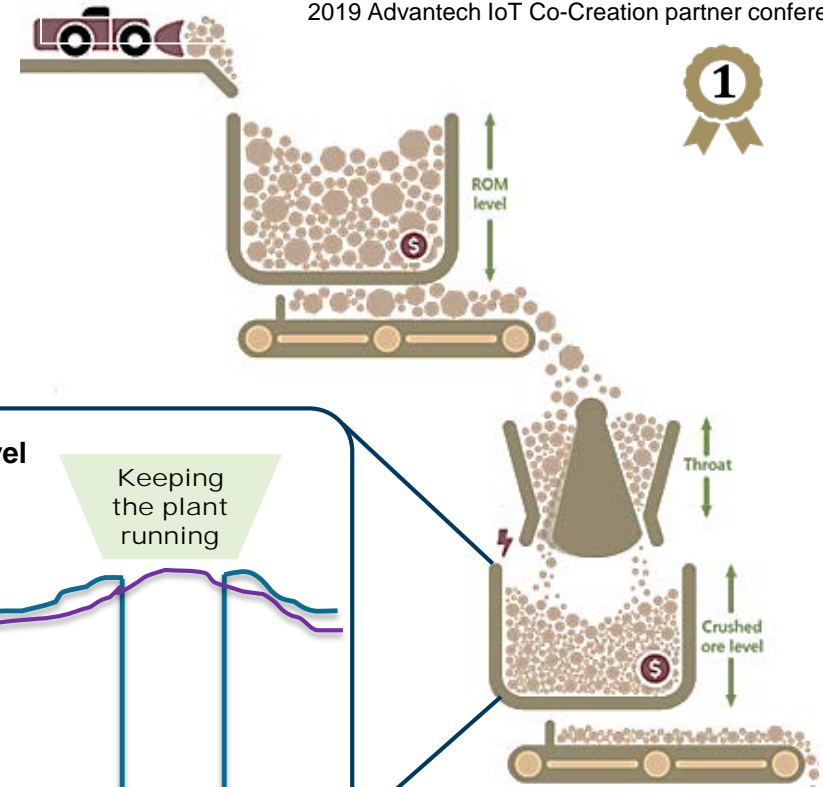
- Virtual sensors “Soft Sensor” run in parallel to actual sensors and predict levels of bins when real sensors are damaged
- This allows the operation to continue until sensors are replaced during scheduled maintenance

## BENEFITS

- Targeting to reduce crusher unplanned outages by 50% using the soft sensor to run the circuit for up to 4 hours

**Winner: Australia’s Best Primary Industry IoT Project**

2019 Advantech IoT Co-Creation partner conference



# NEWCREST MINING LIMITED

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## Board

Peter Hay	Non-Executive Chairman
Sandeep Biswas	Managing Director and CEO
Gerard Bond	Finance Director and CFO
Philip Aiken AM	Non-Executive Director
Roger Higgins	Non-Executive Director
Xiaoling Liu	Non-Executive Director
Vicki McFadden	Non-Executive Director
Peter Tomsett	Non-Executive Director

## Company Secretaries

Francesca Lee & Claire Hannon

## Registered & Principal Office

Level 8, 600 St Kilda Road, Melbourne, Victoria, Australia 3004

Telephone: +61 (0)3 9522 5333

Facsimile: +61 (0)3 9522 5500

Email: [corporateaffairs@newcrest.com.au](mailto:corporateaffairs@newcrest.com.au)

Website: [www.newcrest.com.au](http://www.newcrest.com.au)

## Stock Exchange Listings

Australian Securities Exchange (Ticker NCM)

New York ADR's (Ticker NCMGY)

Port Moresby Stock Exchange (Ticker NCM)

## Forward Shareholder Enquiries to

Link Market Services

Tower 4, 727 Collins Street

Melbourne, Victoria, 3000

Australia

Telephone: 1300 554 474

+61 1300 554 474

Facsimile: +61 (0)2 9287 0303

Email: [registrars@linkmarketservices.com.au](mailto:registrars@linkmarketservices.com.au)

Website: [www.linkmarketservices.com.au](http://www.linkmarketservices.com.au)

## Investor Enquiries

Chris Maitland

+61 3 9522 5717

+61 439 525 135

[Chris.Maitland@newcrest.com.au](mailto:Chris.Maitland@newcrest.com.au)

Tamara Brown

+1 647 255 3139

[Tamara.Brown@newcrest.com.au](mailto:Tamara.Brown@newcrest.com.au)

## Media Enquiries

Chris Maitland

+61 3 9522 5717

+61 439 525 135

[Chris.Maitland@newcrest.com.au](mailto:Chris.Maitland@newcrest.com.au)